OCTOBER 1981 NUMBER 446 -- Part II

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Solar - Geophysical Data

Part II (Comprehensive Reports)

NO. 446 OCTOBER 1981

DATA FOR
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SOLAR-GEOPHYSICAL DATA

No. 446

Issued in two parts

Helen E. Coffey, Editor

Joe H. Allen, Chief
Solar-Terrestrial Physics Division

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Notes:

"434A 46" listed under 1980 Aug means that the sunspot drawings for Aug 1980 were contained in *Solar-Geophysical Data* Number 434 - Part I, beginning on page 46.

A = Part I, B = Part II.

----- = no data available.
blank = data not yet received.

SGD 446 Part II (Comprehensive)

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NOTE ON DELAY OF GROUPED SOLAR FLARE DATA

Beginning with the July 1980 issue of Solar-Geophysical Data, we planned to publish the final listing of solar flares 13 months, rather than 6 months, from the date of observation. Although this schedule has not been met since the July 1980 issue was published, we and our colleagues at the Meudon Observatory plan to return to the 13-month delay as soon as possible. This new schedule will cause the Daily Flare Index and the Regional Flare Index to appear 13 and 14 months from the date of observation. At the same time we are suspending indefinitely publication of the Abbreviated Calendar Record. We deeply regret this situation, but the volume of data recorded during sunspot maximum and computer conversion problems at the Meudon Observatory and at NGSDC have forced these greater delays on us.

For researchers who need the comprehensive solar flare data more promptly, NGSDC plans to generate in the next few weeks "preliminary" listings from February 1980 through the "current" month that lies 13 months from the month of observation. These complete tabulations will lack the final Meudon corrections, and will only be published after they have been made. Nevertheless, printouts for this period will be available on request, if they be recognized as "preliminary" when used in research projects. A fee may be charged for reproducing these data. Please contact the editor, Helen E. Coffey, at (303) 497-6223 or telex 45897 SOLTERWARN BDR.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1981

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
01	127	TORN	43 NS	0926.0		334.0D		1		V0 DISTURBED
	3750	TYKW	28 PRE	0022.0	0126.9	69.0	220	25		
	1000	TYKW	45 C	0035.0	0035.9	1.5	15	2		
	606	LEAR	8 S	0035.1	0035.3	.5	75			
	2000	TYKW	28 PRE	0040.0	0127.0	51.0	240 U	17		
	2840	PEKG	47 GB	0057.0	0155.1	101.0	1559.0			
	2963	YUNN	47 GB	0058.0	0154	182.0				RIF 382.
	3659	YUNN	47 GB	0058.0	0154	182.0				RIF 932.
	9375	YUNN	47 GB	0058.0	0155	182.0				RIF 1403.9
	2930	VORO	47 GB	0105.0	0155	80.0	515			
	17000	NOBE	28 PRE	0105.8	0123.6	17.8	17			0
	4995	LEAR	4 S/F	0106.6	0110.8	13.7	160			
	9400	TYKW	28 PRE	0107.0	0126.9	24.0	215	45		
	9395	PEKG	47 GB	0107.0	0146.2	85.0	8930.0			
	2695	PENT	47 GB	0107.0	0154.3	49.0D	2090.0			
	8800	LEAR	4 S/F	0107.5	0110.8	13.0	110			
	4995	PALE	4 S/F	0108.3	0110.8	7.5	139			
	8800	PALE	4 S/F	0109.6	0110.8	6.5	100			
	2695	PALE	4 S/F	0109.8	0116.6	6.0	38			-
	15400	LEAR	4 S/F	0110.0	0110.8	10.5	18			
	15400	PALE	4 S/F	0110.6	0111.1	3.5	25			
	2695	LEAR	4 S/F	0111.1	0116.8	9.4	48			
	1000	TYKW	28 PRE	0114.0	0114.5	17.0	146	30		
	606	LEAR	4 S/F	0114.1	0114.8	31.0	440			
	1415	LEAR	8 S	0114.6	0115.0	.4	10			
	1415	PALE	4 S/F	0116.3	0117.1	91.4	19			
	4995	LEAR	49 GB	0120.5	0146.1	105.3	3500			
	15400	LEAR	49 GB	0120.5	0146.1	105.3	2300			
	2695	LEAR	49 GB	0120.5	0154.3	105.3	1800			
	8800	LEAR	49 GB	0120.5	0146.1	105.3	4800			
	35000	NAGO	28 PRE	0122.0	0132	11.0	55			
	17000	NOBE	47 GB	0123.6	0146.1	58.0	2065			R
	606	LEAR	49 GB	0123.6	0209.6	64.7	13000			
	500	HIRA		0124.1	0124.1	0209.3		3000		ML
	500	HIRA	48 C	0124.1	0150.5	68.0	14000	1000		SL
	1415	PALE	49 GB	0125.1	0211.8	67.4	3000			
	4995	PALE	49 GB	0125.1	0146.1	118.7	3500			
	15400	PALE	49 GB	0125.1	0146.0	114.5	2900			
	8800	PALE	49 GB	0125.1	0146.0	112.5	5800			
	2695	PALE	49 GB	0125.1	0155.1	96.9	2000			
	606	PALE	49 GB	0125.6	0209.6	62.5	13999			
	1000	TYKW		0126.9E	0126.9		120			
	410	LEAR	49 GB	0129.3	0150.5	56.0	3600			
	410	PALE	49 GB	0129.3	0138.3	55.8	1000			
	200	HIRA		0129.5	0153.3		1160			WL
	200	HIRA		0129.5	0134.3		570			0
	200	HIRA	48 C	0129.5	0144.0	63.0	1300	100		WR
	1000	TYKW		0130.0	0212.0		6800			
	1000	TYKW		0130.0	0207.9		4700			
	1000	TYKW		0130.0	0145.7		1100			
	1000	TYKW	47 GB	0130.0	0209.7	54.0	23000	950		
	1000	TYKW		0130.0	0154.9		2800			
	1000	TYKW		0130.0	0141.2		720			
	208	VORO		0130.0	0155 U		200 D			
	208	VORO	49 GB	0130.0	0145 U	63.0	600 D			
	208	VORO		0130.0	0150 U		600 D			
	208	VORO		0130.0	0158		200 D			
	3750	TYKW		0131.0	0153.7		2380			
	9400	TYKW		0131.0	0210.1		440			
	3750	TYKW		0131.0	0138.8		1200			
	9400	TYKW		0131.0	0153.5		2950			
	2000	TYKW		0131.0	0210.4		785			
	9400	TYKW		0131.0	0135.4		1800			
	2000	TYKW	47 GB	0131.0	0153.9	54.0	2300	550		
	2000	TYKW		0131.0	0211.9		790			
	2000	TYKW		0131.6	0146.6		1240			
	2000	TYKW		0131.0	0140.4		720			
	3750	TYKW		0131.0	0210.3		500			
	3750	TYKW	47 GB	0131.0	0146.2	54.0	2450	700		
	9400	TYKW	47 GB	0131.0	0146.1	49.0	4400	850		
	245	LEAR	49 GB	0132.5	0157.3	49.8	1600			
	100	HIRA		0132.6	0134.2		500			MR
	100	HIRA	48 C	0132.6	0200	115.0	10000	490		WR
	100	HIRA		0132.6	0152.3		8000			MR
	100	HIRA		0132.6	0146.4		5000			WR
	35000	NAGO		0133.0	0146		803			
	35000	NAGO	47 GB	0133.0	0138	32.0	423			
	35000	NAGO		0133.0	0136		744			
	245	PALE	49 GB	0133.1	0153.3	28.2	1199			
	5730	IRKU	46 GB	0146.0E	0146.2	25.0D	1020			R
	5730	IRKU		0146.0	0153.7		780			R
	1415	LEAR	49 GB	0155.0	0211.8	70.8	5900			
	35000	NAGO	29 PBI	0205.0	0210	170.0	193			
	9400	TYKW	29 PBI	0220.0		210.0	150	35		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
01	17000	NOBE	29	PBI	0221.6	0221.6	83.0	97			0
	2000	TYKW	29	PBI	0225.0		150.0	28	9		
	1000	TYKW	30	PBI	0225.0		90.0	6	2		
	3750	TYKW	29	PBI	0225.0		175.0	58	15		
	1000	TYKW	45	C	0231.5	0232.5	1.5	7	2		
	1000	TYKW	45	C	0256.0	0300.0U	6.0	3 D	.5D		
	606	LEAR	8	S	0256.0	0256.1	.6	26			
	15400	PALE	4	S/F	0402.8	0404.1	3.2	110			
	930	BORD	8	S	1016.8	1016.8	1.0	25	1		
	430	KRAK	42	SER	1052.5	1052.5	2.0	800.0D			
	430	KRAK	42	SER	1149.3	1150.0	2.2	300.0			
	2800	OTTA	20	GRF	1150.0	1225	50.0	6.6	3.3		
	2800	OTTA	240	R	1242.0	1245	3.0	4.0	2.0		
	5200	BERN	3	S	1242.0	1245.1	23.0	33.0			
	11800	BERN	3	S	1242.4	1245.1	20.0	51.0			
	8400	BERN	3	S	1242.4	1245.2	23.0	51.0			
	3200	BERN	3	S	1242.6	1245.1	23.0	9.0			
	4995	ATHN	4	S/F	1242.6	1245.3	6.9D	28			
	9400	HUAN	4	S/F	1242.6	1245.0	4.2	48.6	30.3		R
	8800	ATHN	4	S/F	1242.8	1245.1	5.3	41			
	2695	ATHN	4	S/F	1242.8	1245.3	6.0D	04			
	19600	BERN	3	S	1242.9	1245.6	15.0	28.0			
	810	KRAK	2	S/F	1245.0	1245.3	.8	10.0	3.0		
	9400	HUAN	29	PBI	1246.8	1246.8	28.7	12.1	2.9		R
	2800	OTTA	21	GRF	1330.0	1505	500.0	22.4	15.0		
	19600	BERN	3	S	1334.2	1336.1	4.0	62.0			
	35000	BERN	3	S	1334.5	1336.1	3.0	53.0			
	11800	BERN	3	S	1334.6	1336.1	8.0	33.0			
	8400	BERN	3	S	1334.8	1336.1	15.0	18.0			
	3200	BERN	3	S	1335.0	1414.9	115.0	374.0			
	5200	BERN	3	S	1335.0	1415.7	115.0	331.0			
	1415	SGMR	4	S/F	1352.6	1414.1	39.5D	150			
	2800	OTTA			1359.0	1419	40.0	335.0			
	2695	SGMR	47	GB	1359.1	1415.1	34.4D	500			
	8400	BERN	3	S	1400.0	1416.1	90.0	164.0			
	606	SGMR	4	S/F	1400.0	1413.0	32.0D	45			
	11800	BERN	3	S	1400.0	1416.1	90.0	94.0			
	2650	DWIN	47	GB	1400.0	1415	35.0	400	200		
	4995	SGMR	4	S/F	1400.1	1415.1	33.0D	350			
	15400	SGMR	4	S/F	1402.0	1417.0	24.3	77			
	9400	HUAN	2	S/F	1402.4	1411.5U	9.1U	67.6	19.5		L
	8800	SGMR	4	S/F	1403.1	1416.0	29.0D	200			
	19600	BERN	3	S	1406.3	1416.9	85.0	48.0			
	11800	BERN	20	GRF	1539.5	1542.8	12.0	21.0			
	8400	BERN	20	GRF	1539.5	1542.6	13.0	28.0			
	3200	BERN	20	GRF	1539.7	1542.7	13.0	11.0			
	5200	BERN	20	GRF	1539.7	1542.7	13.0	25.0			
	2800	OTTA	2	S/F	1540.0	1541.7	10.0	7.8	3.9		
	2695	SGMR	4	S/F	1540.6	1543.6	7.5D	09			
	15400	SGMR	4	S/F	1540.8	1542.8	8.7	13			
	4995	SGMR	4	S/F	1540.8	1542.6	11.3D	25			
	8800	SGMR	4	S/F	1541.0	1542.8	11.1D	29			
	245	PALE	4	S/F	1846.8	1849.3	3.0	71			
02	100	GORK	43	NS	0510.0		38.0		5.0		
	200	GORK	43	NS	0512.0		54.0		5.0		
	410	LEAR	8	S	0305.0	0305.1	.3	35			
	1000	TYKW	45	C	0323.7	0331.8	11.0	5	1		
	2950	GORK	20	GRF	0359.3	0546.0	210.0	7.0	3.0		
	3750	TYKW	21	GRF	0500.0	0550	120.0	3	1.5		
	2000	TYKW	21	GRF	0510.0	0550	120.0	2	1		
	606	MANI	47	GB	0526.5	0544.0	22.5D	270			
	606	LEAR	47	GB	0526.5	0529.8	4.3	13			
	950	GORK	090	C	0526.6	0538.1	24.51	4.6			
	950	GORK			0526.6	0544.1		367.0			
	950	GORK			0526.6	0546.8		190.0			
	650	GORK	46	C	0527.0	0539 U	26.5	15.0			
	650	GORK			0527.0	0542 U			54.0		
	100	GORK			0527.0	0541.3		55.0D			
	650	GORK			0527.0	0544.3			600.0		
	100	GORK	41	F	0527.0	0528.2	21.0	55.0D			
	1000	TYKW	45	C	0527.0	0544.3	24.0	265	24		
	1415	MANI	47	GB	0531.0	0542.6	19.5	139			
	1415	LEAR	4	S/F	0531.5	0531.8	2.8	11			
	245	LEAR	8	S	0531.5	0532.3	1.8	37			
	1415	ATHN	4	S/F	0539.5	0542.6	8.3	110			
	200	GORK			0540.8	0545.6		70.0			
	200	GORK	46	C	0540.8	0543.9	6.5	45.0			
	3750	TYKW	45	C	0541.0	0546.7	7.0	2	1		
	2000	TYKW	45	C	0541.0	0542.4	8.0	16	3		
	410	LEAR	8	S	0605.5	0605.8	.5	18			
	9400	TYKW	5	S	0626.3	0626.7	1.0	6	2		
	2000	TYKW	20	GRF	0628.0	0632	30.0	2	1		
	3100	CRIM	20	GRF	0629.5	0631.5	6.0	5	2		
	3750	TYKW	5	S	0630.0	0631	4.0	2	1		

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02	2950	GORK	1 S	0834.8	0836.3	3.4	3.0	15.0		
	2950	GORK	1 S	0917.7	0919.0	80.0	2.0	1.0		
	127	TORN	42 SER	1001.1	1001.9	6.0	100			
	2950	GORK	1 S	1008.4	1010.0	18.0	2.0	1.0		
	6100	KISV	45 C	1009.0	1010.5	6.0	7			
	6100	KISV		1009.0	1011.5		7			
	930	BORD	41 F	1017.8	1018.4	.6	14	2		
	260	ONDR	46 C	1047.5	1104.2	42.0	24.0	1.0		
	536	ONDR	46 C	1057.0	1105	23.0	46.0	8.0		
	808	ONDR	45 C	1057.5	1100.4	23.0	21.0	9.0		
	8400	BERN	46 C	1057.5	1104.8	60.0	460.0			
	35000	BERN	46 C	1057.5	1108.3	20.0	502.0			
	11800	BERN	47 GB	1057.5	1104.8	60.0	529.0			ONLY PAPER REC
	19600	BERN	47 GB	1057.5	1108.3	50.0	617.0			
	6100	KISV		1058.0	1108.5		54			
	6100	KISV		1058.0	1103		82			
	6100	KISV	46 C	1058.0	1105	12.0	144			
	2950	GORK	45 C	1058.1	1102.0	16.5	66.0			
	2950	GORK		1058.1	1104.9			42.0		
	9100	GORK		1058.2	1106.2		300.0			
	9100	GORK		1058.2	1105.0		450.0			
	9100	GORK	46 C	1058.2	1102.9	11.3	200.0			
	950	GORK		1058.3	1104.5		35.0			
	950	GORK		1058.3	1109.0		18.0			
	3200	BERN	46 C	1058.3	1101.7	60.0				ONLY PAPER REC
	5200	BERN	46 C	1058.3	1104.7	60.0	153.0			ONLY PAPER REC
	930	BORD	46 C	1058.4	1100.4	18.4	47	12		
	650	GORK	46 C	1058.4	1105.0	15.2	54.0			
	650	GORK		1058.4	1108.4		46.0			
	950	GORK	46 C	1058.6	1101.4	18.0	48.0			
	8800	ATHN	4 S/F	1058.8	1104.8	11.7	370			
	15000	KISV	46 C	1059.0		13.0	80			
	3100	CRIM	28 PRE	1059.0	1100.0	2.0	5			
	2650	DWIN	45 C	1059.0	1102	13.0	60	30		
	4995	ATHN	4 S/F	1059.3	1104.8	11.0D	150			
	2695	ATHN	4 S/F	1059.3	1102.0	8.0D	60			
	2695	SGMR	8 S	1100.0	1109.5	2.0D	65			
	910	KRAK	7 C	1100.2	1102.3	11.0	35.0	10.0		
	4995	SGMR	4 S/F	1100.3	1109.6	4.5D	71			
	1415	SGMR	4 S/F	1100.5	1104.6	9.6D	51			
	410	SGMR	4 S/F	1100.8	1105.0	12.2D	139			
	430	KRAK	46 C	1101.0	1104.7	10.5	400.0	18.0		
	3000	IZMI	45 C	1101.0	1102.0	9.0	50	27		
	3100	CRIM	7 C	1101.0	1102.2	14.0	69	23		
	8800	SGMR	4 S/F	1101.5E	1105.0	8.8D	98			
	245	SGMR	4 S/F	1102.6	1104.3	5.2D	49			
	606	SGMR	4 S/F	1103.0	1108.1	9.3D	95			
	200	GORK	2 S/F	1103.9	1104.4	2.8	40.0			
	3100	CRIM	1 S	1104.0	1104.8	1.0	18	5		
	204	IZMI	5 S	1104.0	1104.5	1.0	100	70		
	3100	CRIM	1 S	1106.8	1109.0	3.0	13	4		
	9100	GORK	30 PBI	1109.4	1109.5	34.0E	46.0			
	6100	KISV	21 GRF	1137.0	1137.5	6.0	17			
	9100	GORK	1 S	1137.1	1137.4	1.0	10.0	5.0		
	8800	ATHN	8 S	1137.3	1138.0	1.7	21			
	4995	ATHN	8 S	1137.8	1138.1	1.7D	27			
	15000	KISV	21 GRF	1151.4	1151.7	3.5	7			
	2800	OTTA	1 S	1201.0	1201.7	7.0	4.4	2.2		
	260	ONDR	45 C	1228.0	1230	11.0	14.0	5.5		
	808	ONDR	45 C	1248.0	1258.2	11.0	15.0	4.0		
	2800	OTTA	23 GRF	1600.0	1708	150.0	16.4	8.2		
	5200	BERN	21 GRF	1630.2	1636.6	22.0U	104.0			
	3200	BERN	21 GRF	1631.1	1636.6	22.0U	41.0			
	8400	BERN	21 GRF	1635.3	1636.7	12.0U	30.0			
	4995	SGMR	4 S/F	1635.6	1636.3	9.2D	79			
	2695	SGMR	4 S/F	1635.8	1637.3	7.5D	24			
	2800	OTTA	3 S	1636.0	1637	2.0	18.0	8.6		
	9400	HUAN	2 S/F	1636.0	1636.6	2.1	17.3	12.4		R
	11800	BERN	21 GRF	1636.3	1636.6	7.0U	27.0			
	8800	SGMR	4 S/F	1636.3	1636.6	2.7	11			
	9400	HUAN	29 PBI	1638.1	1638.1	112.2	8.6	6.6		0
	8800	PALE	47 GB	1658.6	1711.1	30.0	65			
	2695	PALE	47 GB	1658.8	1659.3	1.2	38			
	4995	PALE	47 GB	1659.1	1659.3	.2	24			
	1415	PALE	8 S	1702.1	1702.3	.2	19			
	2800	OTTA	23 GRF	1923.0	1952	190.0	13.8	6.0		
	9400	HUAN		1923.8	1925.3		12.1			
	9400	HUAN	2 S/F	1923.8	1924.4	3.3	13.8	9.5		0
	2800	OTTA	46F C	1924.0	1924.5	3.0	27.0			
	4995	PALE	8 S	1924.1	1924.5	1.5	29			
	2695	PALE	8 S	1924.3	1924.5	1.3	29			
	606	PALE	8 S	1924.5	1925.3	1.0	220			
	2800	OTTA	22 GRF	2055.0	2101	30.0	8.0	2.8		
	200	HIRA	46 C	2132.6	2135.0	4.2	42	12		WL
	100	HIRA	46 C	2132.9	2135.4	5.6	3000	480		MR

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02	2800	OTTA	22 GRF	2133.0	2137	17.0	4.4	2.6		
	9400	TYKW	5 S	2134.0	2141	18.0	5	2.5		
	3750	TYKW	45 C	2134.0	2135.7	17.0	10	3		
	2000	TYKW	45 C	2134.0	2135.8	3.5	40	5		
	500	HIRA	46 C	2134.3	2135.0	3.0	30	18		SL
	1000	TYKW	45 C	2135.6	2136.6	2.5	55	7		
	410	PALE	8 S	2135.1	2136.1	1.2	48			
	1415	PALE	8 S	2135.3	2135.5	.3	40			
	9400	TYKW	20 GRF	2153.0	2205	40.0	2	1		
	3750	TYKW	20 GRF	2153.0	2205	50.0	3.5	2		
	1000	TYKW	45 C	2154.0	2154.7	2.0	18	2.5		
	3750	TYKW	45 C	2310.0	2318.7	15.0	16	7		
	2695	PENT	21 GRF	2310.0	2320	75.0	10.0	3.4		
	9400	TYKW	20 GRF	2313.0	2320	30.0	3.5	1.5		
	2000	TYKW	20 GRF	2315.0	2320	40.0	3	1.5		
	3750	TYKW	29 PBI	2325.0		45.0	5	2.5		
	2695	PENT	1 S	2359.0	0002	5.0	4.0	2.8		
03	260	ONDR	43 NS	0742.0		388.0D	78.0	7.0		
	127	TORN	43 NS	0820.0		260.0D		14		V0
	100	GORK	43 NS	0844.0		211.0E		5.0		
	208	VORO	43 NS	2317.0		168.0D		11		
	1415	MANI	4 S/F	0015.0	0018.1	5.3D	15			
	4995	MANI	4 S/F	0017.0	0018.8	2.3	08			
	2695	MANI	4 S/F	0017.0	0018.1	3.5D	22			
	606	MANI	47 GB	0017.8	0018.1	1.2D	19			
	3750	TYKW	21 GRF	0025.0	0040	35.0	1	.5		
	245	LEAR	8 S	0028.3	0028.8	1.3	11			
	410	LEAR	8 S	0028.5	0028.8	1.1	17			
	245	LEAR	8 S	0035.8	0036.0	.3	39			
	2000	TYKW	5 S	0037.0	0038.4	3.0	2	.5		
	3750	TYKW	45 C	0037.0	0038.3	3.0	2.5	1		
	1000	TYKW	45 C	0037.6	0038.4	2.0	9	3		
	606	LEAR	8 S	0037.1	0038.1	1.7	95			
	1415	LEAR	8 S	0037.8	0038.1	.8	11			
	2000	TYKW	21 GRF	0106.0	0120	30.0	2	1		
	3750	TYKW	21 GRF	0110.0	0122.0	30.0	3.5	1.5		
	9400	TYKW	5 S	0114.0	0127.0	20.0	5	1		
	245	LEAR	8 S	0119.0	0119.1	1.1	20			
	200	HIRA	46 C	0125.9	0126.7	2.0	310	137		0
	3750	TYKW	5 S	0126.0	0127.1	6.0	5	1.5		
	100	HIRA	46 C	0126.0	0127.0	2.9	3300	600		MR
	500	HIRA	46 C	0126.0	0126.7	4.0	36	10		0
	2000	TYKW	45 C	0126.0	0127.0	6.0	11	2.5		
	1000	TYKW	45 C	0126.0	0127.0	6.0	64	7		
	245	LEAR	8 S	0126.0	0126.3	1.6	280			
	2840	PEKG	1 S	0126.0	0127	3.0	9.0	2.0		
	2695	PENT	1 S	0126.5	0127.3	1.5	6.8	3.4		
	410	LEAR	8 S	0126.5	0126.8	.8	77			
	1415	LEAR	8 S	0126.6	0126.8	.5	31			
	606	LEAR	8 S	0126.8	0126.8	.3	110			
	606	LEAR	4 S/F	0128.8	0129.8	2.3	18			
	410	LEAR	8 S	0129.1	0129.5	.9	39			
	9400	TYKW	28 PRE	0140.0	0146	25.0	3	2		
	3750	TYKW	28 PRE	0143.0	0203	20.0	3	1.5		
	1000	TYKW	8 S	0145.6	0145.8	.4	4	1		
	2000	TYKW	28 PRE	0150.0	0200	13.0	2	1		
	2840	PEKG	28 PRE	0154.0	0207	13.0	8.0	4.0		
	1000	TYKW	21 GRF	0200.0	0225	120.0	3	1.5		
	3659	YUNN	7 C	0200.6	0210	30.0				RIF 19.8
	2840	PEKG	45 C	0201.0	0210.2	38.0	33.0	21.0		
	2000	TYKW	45 C	0203.0	0210.1	27.0	11	7		
	3750	TYKW	45 C	0203.0	0209.9	27.0	43	15		
	1000	TYKW	42 SER	0203.5	0209.4	6.5	5	.5		
	9400	TYKW	5 S	0205.0	0211	15.0	10	8		
	2963	YUNN	7 C	0205.0	0210	34.0				RIF 15.
	2930	VORO	45 C	0205.0	0210	30.0	41			
	1000	TYKW	45 C	0210.8	0211.4	1.0	9	2.5		
	1415	LEAR	8 S	0210.8	0211.1	1.0	25			
	2840	PEKG	29 PBI	0216.0	0218.5	23.0	19.0	4.3		
	9400	TYKW	29 PBI	0220.0		100.0	8	4		
	1000	TYKW	5 S	0228.0	0228.4	1.5	1.5	.5		
	3750	TYKW	29 PBI	0230.0		100.0	8	4		
	2000	TYKW	29 PBI	0230.0		90.0	8	3.5		
	1000	TYKW	45 C	0235.0	0235.9	2.0	5	1.5		
	1000	TYKW	8 S	0252.9	0253.0	.4	3.5	1		
	1000	TYKW	5 S	0353.4	0353.7	.5	10	3		
	410	LEAR	47 GB	0435.5	0435.6	.3	580			
	2000	TYKW	20 GRF	0440.0	0500	50.0	2	1		
	3750	TYKW	20 GRF	0445.0	0510	55.0	2	1		
	15400	ATHN	4 S/F	0446.6	0449.3	5.4	26			
	4995	ATHN	4 S/F	0446.6	0449.3	5.5D	06			
	8800	ATHN	4 S/F	0446.6	0449.3	5.4D	13			
	2695	ATHN	4 S/F	0446.6	0450.0	5.5D	03			
	2000	TYKW	20 GRF	0539.0	0550	50.0	2	1		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
03	3750	TYKW	20 GRF	0540.0	0555	110.0	2	1		
	245	LEAR	8 S	0613.8	0613.8	.8	23			
	2950	GORK	1 S	0734.5	0736.3	4.0	2.0	1.0		
	2950	GORK	20 GRF	0748.0	0756.0	10.0	2.0	1.0		
	100	GORK	4 S/F	0754.7	0755.8	1.8	50.0			
	650	GORK	1 S	0755.0	0755.9	1.5	3.0	15.0		
	200	GORK	4 S/F	0755.0	0755.8	1.4	70.0D			
	410	LEAR	8 S	0755.0	0755.1	.8	08			
	245	LEAR	8 S	0755.1	0755.6	.9	82			
	606	LEAR	8 S	0755.1	0756.0	1.7	06			
	950	GORK	1 S	0755.3	0756.0	1.1	6.0	3.0		
	200	HIRA	8 S	0755.5	0755.5	.4	530			0
	2950	GORK	20 GRF	0803.0		230.0E				
	3100	CRIM	20 GRF	0805.0	0808.0	5.0	3	1		
	245	LEAR	8 S	0836.8	0837.0	.5	22			
	35000	BERN	46 C	0850.0	1025.0	190.0	209.0			
	9100	GORK	23 GRF	0859.0	1046.7	170.0E	67.0			
	2963	YUNN	46 C	0900.0	0950	60.0				RIF 277.
	3659	YUNN	48 C	0900.0	0950	66.0				RIF 300.
	5200	BERN	47 GB	0902.0	1019.6	360.0	739.0			
	19600	BERN	46 C	0902.0	1021.0	280.0	260.0			
	11800	BERN	46 C	0902.0	1019.6	300.0	377.0			
	3200	BERN	47 GB	0902.0	1019.8	360.0	608.0			
	8400	BERN	47 GB	0902.0	1019.6	330.0	610.0			
	3100	CRIM	28 PRE	0902.5	0905.0	11.0	4	1		
	6100	KISV		0912.0	1003		47			
	6100	KISV		0912.0	1007.3		81			
	6100	KISV	45 C	0912.0	1019.8	74.0	314			
	6100	KISV		0912.0	0921.7		17			
	6100	KISV		0912.0	1013.5		66			
	6100	KISV		0912.0	1011.5		76			
	6100	KISV		0912.0	0919.5		17			
	6100	KISV		0912.0	0949.8		170			
	6100	KISV		0912.0	0947.6		157			
	3100	CRIM	3 S	0913.0	0919.2	14.0	62	21		
	2650	DWIN	49 GB	0913.6	1020	90.0	570 D			
	3100	CRIM	30 PBI	0913.5	1036.0	164.0D	64	21		
	2950	GORK	45 C	0914.3	0919.4	11.7	48.0			
	2950	GORK		0914.3	0922.1		33.0			
	810	KRAK	7 C	0914.5	0922.5	7.0	32.0	5.0		
	2695	ATHN	4 S/F	0916.6	0916.8	9.4D	51			
	4995	ATHN	4 S/F	0916.6	0919.3	7.9	27			
	3000	IZMI	47 GB	0917.2	1020.0	32.8	356	172		
	950	GORK	23 GRF	0918.0		117.0				
	1415	ATHN	4 S/F	0918.5	0921.3	4.0D	33			
	650	GORK	21 GRF	0918.7		174.0D				
	930	BORD	45 C	0919.0	0950.7	105.0	1102	75		
	650	GORK	40 F	0919.4	0920.2	3.7	25.0			
	808	ONDR	49 GB	0920.0		105.0	75.0D	61.0		
	950	GORK	4 S/F	0920.6	0921.5	2.0	57.0			
	9375	YUNN	48 C	0923.0	1020	97.0				RIF 173
	3100	CRIM		0927.0	1010 U		221 D			
	3100	CRIM	45 C	0927.0	0948 U		221 D			
	3100	CRIM		0927.0	1022 U		221 D			
	1415	ATHN	47 GB	0934.3	1020.0	74.7D	450			
	4995	ATHN	47 GB	0934.3	0949.6	74.7D	540			
	2695	ATHN	47 GB	0934.3	1020.0	74.7D	770			
	2950	GORK	45 C	0934.7	0943.4	66.0	86.0			
	2950	GORK		0934.7	0950.0		410.0			
	2950	GORK		0934.7	0954.0		166.0			
	2950	GORK		0934.7	1007.7		225.0			
	2950	GORK		0934.7	1010.0		208.0			
	2950	GORK		0934.7	0947.7		450.0			
	2950	GORK		0934.7	1020.0		550.0			
	2950	GORK		0934.7	0945.0		110.0			
	950	GORK		0935.1	0950.5		970.0			
	950	GORK		0935.1	1026.7		120.0			
	950	GORK		0935.1	1020.0		150.0			
	950	GORK	46 C	0935.1	0943.8	52.0	530.0			
	950	GORK		0935.1	1006.7		360.0			
	950	GORK		0935.1	0957.6		490.0			
	4995	LEAR	4 S/F	0935.3	0949.6	29.7D	480			
	1415	LEAR	4 S/F	0935.3	0951.6	29.7D	300			
	5730	IRKU	45 C	0935.5	0947.6	24.0	380			L
	5730	IRKU		0935.5	0950.0		425			R
	810	KRAK		0935.7	0954 U		1000.0D			
	810	KRAK		0935.7	1025.7		260.0			
	810	KRAK		0935.7	1006.7		200.0			
	810	KRAK	49 GB	0935.7	0950 U	82.5	1000.0D	120.0		
	2695	LEAR	47 GB	0936.1	0948.1	28.9D	500			
	536	ONDR	49 GB	0937.0		82.0	50.0D	39.0		
	15000	KISV	45 C	0937.0	0949.8	22.0	144			
	15000	KISV		0937.0	0950.3		144			
	15000	KISV		0937.0	0947.3		99			
	15000	KISV		0937.0	0944.5		44			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
03	650	GORK	46 C	0937.2	0945.2	31.8	110.0			
	606	LEAR	47 GB	0937.8	0951.1	27.2D	2700			
	8800	ATHN	47 GB	0939.3	1020.0	69.7	830			
	9100	GORK		0939.5	0949.8		280.0			
	430	KRAK	49 GB	0939.5	0950.5U	79.0	700.0D	86.0		
	9100	GORK	46 C	0939.5	0947.6	15.7	240.0			
	430	KRAK		0939.5	1019.3		290.0			
	430	KRAK		0939.5	1006.5		330.0			
	410	LEAR	8 S	0939.8	0940.1	.7D	47			
	260	ONDR	49 GB	0940.0		60.0	212.0D	113.0		
	200	GORK		0940.6	0956.2		290.0			
	200	GORK		0940.6	1000.4		840.0			
	200	GORK	46 C	0940.8	0951.6	28.0	240.0			
	8800	LEAR	4 S/F	0940.8	0949.8	17.8D	370			
	8800	MANI	47 GB	0943.5	0949.5	8.5	560			
	2695	MANI	47 GB	0943.5	0948.5	8.5D	310			
	1415	MANI	47 GB	0943.5	0945.8	8.5D	80			
	4995	MANI	47 GB	0943.5	0949.5	8.5D	710			
	15400	LEAR	4 S/F	0944.3	0949.6	10.0D	180			
	606	MANI	47 GB	0945.0	0951.6	12.0D	91			
	204	IZMI	45 C	0945.0	1003.0	25.0	1000	100		
	245	LEAR	4 S/F	0945.3	0955.3	19.7D	260			
	127	TORN	47 GB	0946.9	0948.9	3.8	5000	2500		
	127	TORN	27 RF	0947.0	1006.2	35.0	670	60		
	100	GORK	46 C	0947.7	0949.1	33.3	3300.0			
	650	GORK		0951.0	0951.0		22.0			
	650	GORK		0951.0	0955.8		860.0			
	33	UPIC	48 C	0956.4	0956.6	22.0				
	29	UPIC	48 C	0957.2	0957.5	21.4				
	15000	KISV	29 PBI	1001.0		129.0	42			
	5730	IRKU	45 C	1004.5	1007.3	22.0D	135			R
	5730	IRKU		1004.5	1011.0		90			R
	5730	IRKU		1004.5	1019.7		270			R
	9100	GORK	45 C	1006.0	1006.5	6.2	64.0			
	100	GORK		1006.7	1006.7		1650.0			
	9100	GORK		1007.2	1007.2		86.0			
	200	GORK	30 PBI	1008.5	1008.6	124.0E	55.0			
	15000	KISV		1012.0	1013.1		32			
	15000	KISV		1012.6	1014.1		54			
	15000	KISV	45 C	1012.0	1012.6	7.0	71			
	15000	KISV		1012.0	1015.1		33			
	15000	KISV		1012.0	1017.5		13			
	9100	GORK	3 S	1017.6	1019.7	13.0	430.0			
	204	IZMI	40 F	1018.5	1020.0	66.5	50			
	650	GORK	45 C	1019.2	1021.0	22.8	160.0			
	650	GORK		1019.2	1026.6		180.0			
	15000	KISV	8 S	1022.8	1022.9	.8	55			
	15000	KISV	4 S/F	1023.6	1025.8	10.0	91			
	6100	KISV	PBI	1026.0			154			
	200	GORK	2 S/F	1114.0	1117.8	6.0	25.0			
	3100	CRIM	3 S	1125.5	1127.8	5.0	23	7		
	2950	GORK	3 S	1125.7	1128.0	4.9	19.0			
	430	KRAK		1126.0	1127.3		400.0			
	430	KRAK	42 SER	1126.0	1126.3	2.0	200.0			
	2650	DWIN	1 S	1126.0	1127	4.0	10	5		
	6100	KISV	4 S/F	1126.0	1127.8	4.0	68			
	15000	KISV	4 S/F	1126.0	1128.5	8.0	17			
	4995	ATHN	4 S/F	1126.0	1127.8	7.5D	55			
	9400	HUAN	4 S/F	1126.1	1127.8	3.9	49.9	24.8		0
	8800	ATHN	4 S/F	1126.1	1127.6	6.9	57			
	2695	ATHN	4 S/F	1126.3	1127.8	6.8D	09			
	9100	GORK	46 C	1126.5	1127.6	4.7	60.0			
	536	ONDR	45 C	1126.7	1127.5	2.5	49.0	6.0		
	650	GORK	4 S/F	1126.8	1127.3	2.0	39.0			
	9100	GORK		1128.3	1128.3		55.0			
	2800	OTTA	21 GRF	1140.6	1220	285.0D	25.4			
	430	KRAK	7 C	1150.0	1153.5	7.0	41.0	7.0		
	200	GORK		1150.4	1158.4		240.0			
	200	GORK	46 C	1150.4	1154.1	8.5	60.0			
	127	TORN	42 SER	1150.4	1150.9	5.3	70			
	204	IZMI	41 F	1150.5	1158.2	10.0	160			
	4995	ATHN	4 S/F	1151.3	1154.6	16.8	26			
	650	GORK		1151.4	1201.5		14.0			
	650	GORK		1151.4	1154.8		45.0			
	650	GORK	4 C	1151.4	1153.8	13.3	30.0			
	536	ONDR	45 C	1151.5	1153.8	10.5	45.0	7.0		
	2695	ATHN	4 S/F	1151.6	1201.3	15.2D	110			
	810	KRAK	7 C	1152.5	1154.0	2.0	61.0	13.0		
	808	ONDR	41 F	1152.5	1155	39.0	65.0	14.0		
	2650	DWIN	41 F	1153.0	1201	12.0	155	30		
	930	BORD	46 C	1153.0	1155	40.0	63	11		
	6100	KISV	27 RF	1153.0	1205	31.0	5			
	3100	CRIM	1 S	1153.3	1154.5	3.0	21	7		
	1415	ATHN	4 S/F	1153.5	1154.1	11.8D	49			
	100	GORK		1153.5	1203.0		5000.0			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
03	100	GORK	46	C	1153.5	1154.4	12.2	60.0D			
	2800	OTTA	4	S/F	1153.7	1154.5	2.0	18.0	10.0		
	6100	KISV	4	S/F	1154.0	1154.5	2.5	10			
	9400	HUAN	20	GRF	1154.3	1201.9	14.6	8.6	2.9		0
	810	KRAK	7	C	1158.5	1200.0	5.5	30.0	5.0		
	127	TORN	25	R	1158.7	1159.2	1.5	700	3		
	127	TORN	27	RF	1200.0	1201.0	4.7	1200			
	2800	OTTA	4A	S/F	1200.9	1201.2	5.0	22.4	6.0		
	3100	CRIM	1	S	1201.0	1201.3	3.0	57	19		
	6100	KISV	1	S	1201.0	1201.5	4.0	3			
	2800	OTTA	8	S	1201.2	1201.2	.1	125.0			
	33	UPIC	46	C	1205.3	1206.1	2.7				
	29	UPIC	4	S/F	1206.1	1207	1.3				
	810	KRAK	27	RF	1209.0	1218.5	21.0	35.0	12.0		
	430	KRAK	45	C	1209.7	1219.0	20.0	80.0	30.0		
	606	SGMR	4	S/F	1212.6	1220.6	12.0D	139			
	410	SGMR	4	S/F	1213.5	1219.5	13.6D	32			
	245	SGMR	4	S/F	1213.6	1220.1	11.4	11			
	1415	SGMR	4	S/F	1213.8	1220.0	12.3D	22			
	536	ONDR	41	F	1214.0	1220	16.0	43.0	27.0		
	6100	KISV	1	S	1234.0	1235.2	3.0	6			
	2800	OTTA	1	S	1234.5	1235.3	1.5	2.6	1.3		
	9400	HUAN	1	S	1306.3	1307.4	2.4	15.5	6.1		0
	6100	KISV	1	S	1307.0	1307.4	2.0	6			
	930	BORD	41	F	1416.4	1416.9	.6	28	2		
	2800	OTTA	24	OAR	1635.0	1655	20.0	7.6	3.8		
	930	BORD	46	C	1639.0	1648.7	12.0	31	8		
	2800	OTTA	40	F	1640.0	1641.9	11.0	8.8			
	2800	OTTA	4	S/F	1747.0	1753.7	16.0	71.4	24.6		
	9400	HUAN	23	GRF	1753.0	1844.0	102.1	39.6	7.1		0
	4995	PALE	4	S/F	1753.3	1754.1	4.5	22			
	2695	PALE	8	S	1753.3	1754.0	1.5	41			
	930	BORD	46	C	1758.2	1801.9	16.0D	270			SUNSET
	2800	OTTA	30	PBI	1803.0	1803	100.0	4.4			
	930	BORD			1805.6			260			
	2800	OTTA	45	C	1808.0	1847	45.0	58.0	17.4		
	2695	SGMR	4	S/F	1811.0	1818.0	17.0D	33			
	4995	SGMR	4	S/F	1814.0	1818.1	10.5D	11			
	1415	SGMR	4	S/F	1814.1	1818.3	11.9	11			
	8800	PALE	4	S/F	1839.1	1846.8	11.7	110			
	9400	HUAN	4	S/F	1845.4	1846.4	5.4	79.1	31.3		R
	4995	PALE	4	S/F	1845.6	1846.8	4.2	77			
	15400	PALE	4	S/F	1845.6	1847.0	5.2	72			
	15400	SGMR	4	S/F	1846.0	1846.8	8.0	63			
	2695	PALE	8	S	1846.3	1847.1	2.0	38			
	245	PALE	8	S	1846.6	1847.1	.7	150			
	2800	OTTA	40	F	2021.0	2026	5.2	23.2			
	245	PALE	47	GB	2021.6	2022.1	4.7	920			
	100	HIRA	46	C	2021.6	2022.0	1.4	350	70		WR
	200	HIRA	46	C	2021.8	2021.8	1.6	370 U	65 U		SUNRISE
	200	HIRA	46	C	2026.2	2026.7	1.5	1140 U	400 U		SUNRISE
	100	HIRA	46	C	2026.3	2027.0	1.2	3500	270		WR
	2800	OTTA	40	F	2038.0	2041.2	7.0	8.0			
	2695	PENT	21	GRF	2310.0	2350	150.0	32.0	16.0		
	3750	TYKW	21	GRF	2310.0	2350	160.0	31	14		
	2000	TYKW	21	GRF	2315.0	2345	160.0	16	7		
	1000	TYKW	21	GRF	2315.0	2345	150.0	4	2		
	410	LEAR	8	S	2315.6	2315.6	.2	67			
	17000	NOBE	20	GRF	2318.9	0012.9	120.0	29			0
	9400	TYKW	21	GRF	2320.0	0013	150.0	35	15		RAIN
	4995	LEAR	47	GB	2325.8	2350.1	22.7	40			
	2695	LEAR	47	GB	2325.8	2330.5	22.7	45			
	1000	TYKW	45	C	2326.0	2328.3	13.0	65	6		
	2000	TYKW	45	C	2326.0	2331.2	15.0	16	5		
	3750	TYKW	45	C	2326.0	2330.2	12.0	7	2.5		
	500	HIRA	46	C	2326.0	2326.7	11.0	60	8		WR
	606	LEAR	8	S	2326.8	2328.1	.5	16			
	2695	PENT	40	F	2327.0	2330.7	5.0	30.0			
	8800	LEAR	47	GB	2327.6	2350.1	20.9	33			
	1415	LEAR	47	GB	2328.1	2328.3	4.2	40			
	245	LEAR	4	S/F	2328.3	2328.6	2.2	25			
	200	HIRA	46	C	2329.0	2329.8	3.0	380	28		
	208	VORO	3	S	2329.0	2329.5	1.0	104			
	35000	NAGO	20	GRF	2331.0	2351	58.0	35			
04	245	LEAR	43	NS	0017.5	0838.6	587.5D	130			
	29	UPIC	43	NS	0647.0	0803	455.8D				
	33	UPIC	43	NS	0647.7	0802.7	454.7D				
	260	ONDR	44	NS	0700.0E		428.0D	118.0	3.0		
	127	TORN	43	NS	0810.0	1123.2	250.0D	20	2		V0
	204	IZMI	43	NS	0835.0		205.0D	65			
	200	GORK	43	NS	0842.0		130.0D		5.0		
	208	VORO	44	NS	2200.0E		360.0D		14		
	245	LEAR	47	GB	0000.1	0016.1	15.8	26			
	3750	TYKW	5	S	0015.0	0018.0	7.0	8	2.5		

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04	2000	TYKW	45 C	0015.0	0018.0	6.0	13	4		
	1000	TYKW	45 C	0016.0	0017.6	4.0	11	2.5		
	606	LEAR	8 S	0017.1	0017.8	1.7	60			
	410	LEAR	47 GB	0017.1	0018.0	1.7	110			
	2695	PENT	2 S/F	0017.2	0017.5	3.0	7.2	3.6		
	500	HIRA	46 C	0017.4	0017.7	1.0	300	40		0
	2840	PEKG	29 PBI	0045.0		28.0	22.0	15.0		
	410	LEAR	8 S	0106.0	0106.1	.3	17			
	9400	TYKW	5 S	0130.0	0130.6	2.0	6	1.5		
	1000	TYKW	45 C	0223.5	0225.5	3.5	20	3		
	245	LEAR	4 S/F	0223.8	0225.1	2.2	130			
	410	LEAR	4 S/F	0223.8	0225.8	2.3	190			
	606	LEAR	4 S/F	0223.8	0225.8	2.3	110			
	2000	TYKW	45 C	0224.0	0225.4	4.0	14	3		
	3750	TYKW	5 S	0224.0	0225.3	3.0	11	3.5		
	9400	TYKW	45 C	0224.0	0225.6	3.0	9	2.5		RAIN
	3659	YUNN	42 SER	0224.0	0231	8.0				RIF 9.3
	2963	YUNN	42 SER	0224.6	0231.5	8.5				RIF 6.4
	2840	PEKG	45 C	0224.0	0225.4		13.2	6.0		
	2840	PEKG	45 C	0224.0	0231.7	19.0	17.4			
	1415	LEAR	4 S/F	0224.1	0225.3	2.7	11			
	8800	LEAR	4 S/F	0224.5	0225.1	2.3	10			
	2695	LEAR	8 S	0224.8	0225.1	2.0	11			
	4995	LEAR	8 S	0224.8	0225.1	2.0	17			
	3750	TYKW	30 PBI	0227.0		20.0	3	1.5		
	208	VORO	4 S/F	0230.0	0232	3.0	69			
	2930	VORO	3 S	0230.0	0233	10.0	20			
	9400	TYKW	5 S	0230.5	0231.6	2.5	45	10		
	3750	TYKW	45 C	0230.5	0231.6	3.5	23	4.5		
	606	LEAR	4 S/F	0230.5	0231.8	3.3	11			
	4995	LEAR	4 S/F	0230.5	0231.8	2.3	34			
	245	LEAR	4 S/F	0230.5	0231.6	2.3	72			
	410	LEAR	4 S/F	0230.5	0231.6	2.8	19			
	15400	LEAR	4 S/F	0230.5	0231.8	2.5	18			
	8800	LEAR	4 S/F	0230.5	0231.8	2.5	52			
	2695	LEAR	4 S/F	0230.5	0231.8	2.3	11			
	9395	PEKG	5 S	0231.0	0231.7	2.0	29.0	8.3		
	1000	TYKW	45 C	0231.0	0231.8	2.0	10	4		
	2000	TYKW	5 S	0231.0	0231.8	2.0	9	1.5		
	9375	YUNN	8 S	0231.0	0232	1.5				RIF 11
	2000	TYKW	31 ABS	0233.0	0430	170.0	-4.5	-2.5		
	2840	PEKG	29 PBI	0234.0	0245.9	26.0	7.3	5.2		
	9400	TYKW	31 ABS	0235.0	0330	175.0	-6	-3		
	1000	TYKW	31 ABS	0240.0	0350	130.0	-1	-.5		
	3750	TYKW	45 C	0245.6	0245.8	2.0	1.5	.4		
	1000	TYKW	45 C	0245.0	0245.3	1.5	3	1		
	2000	TYKW	5 S	0245.0	0245.5	2.0	1	.5		
	606	LEAR	8 S	0245.0	0245.1	1.1	86			
	3750	TYKW	31 ABS	0247.0	0400	160.0	-4	-2		
	2000	TYKW	45 C	0353.0	0353.7	1.5	2.5	1		
	2950	GORK	21 GRF	0435.0		360.0E				
	606	LEAR	8 S	0450.5	0450.6	.8	41			
	4995	MANI	47 GB	0453.1	0502.3	19.0D	2900			
	8800	MANI	47 GB	0453.1	0502.3	19.0	4200			
	1000	TYKW	28 PRE	0500.0	0500.4	1.5	1	.3		
	9375	YUNN	47 GB	0501.0	0502	5.0				RIF 375.
	6100	KISV	4 S/F	0501.0	0502.8	4.0	213			
	3659	YUNN	47 GB	0501.0	0503	8.0				RIF 598.
	2840	PEKG	47 GB	0501.0	0503.2	8.0	961.0			
	9100	GORK	3 S	0501.3	0503	7.9	218.0D			
	2950	GORK	3 S	0501.4	0503 U	5.0	90.0			
	2000	TYKW	47 GB	0501.4	0502.6	7.0	1100	170		
	3750	TYKW	47 GB	0501.4	0502.6	7.0	1500	180		
	9400	TYKW	47 GB	0501.4	0502.4	4.0	3050	440		
	1000	TYKW	47 GB	0501.5	0503.2	8.5	1010	150		
	500	HIRA	45 C	0501.5	0501.9	10.0	3000	250		0
	3100	CRIM	3 S	0501.5	0503	5.0	241 D			
	8800	LEAR	49 GB	0501.5	0502.3	4.3	4200			
	8800	ATHN	47 GB	0501.6	0503.0	5.0	1600			
	2695	ATHN	47 GB	0501.6	0503.0	5.9D	810			
	950	GORK	3 S	0501.6		4.3	100.0D			
	5730	IRKU	2 S	0501.6	0502 U	4.0U	180			R
	100	HIRA		0501.6	0503.7		90000			
	100	HIRA	48 C	0501.6	0509.6	21.3	100000	8100		
	200	HIRA	48 C	0501.6	0504.5	13.7	24000	1100		0
	4995	LEAR	49 GB	0501.6	0502.3	4.2	1900			
	4995	ATHN	47 GB	0501.6	0503.0	5.0D	690			
	410	LEAR	49 GB	0501.6	0502.1	6.5	30000			
	1415	ATHN	47 GB	0501.6	0503.0	9.2D	1100			
	15400	LEAR	49 GB	0501.8	0502.3	3.8	50000			
	245	LEAR	49 GB	0501.8	0502.5	5.8	70000			
	606	LEAR	49 GB	0501.8	0502.6	6.0	770			
	606	MANI	47 GB	0501.8	0502.1	10.3D	460			
	1415	MANI	47 GB	0501.8	0502.3	7.2D	1199			
	2695	LEAR	49 GB	0501.8	0502.6	4.5	1300			

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04	2695	MANI	47 GB	0501.8	0502.3	10.3D	9800			
	17000	NOBE	47 GB	0501.9	0502.4	4.0	2730			LR
	35000	NAGO	5 S	0502.0	0502	2.0	1890			
	1415	LEAR	49 GB	0502.0	0502.6	4.6	70000			
	9395	PEKG	47 GB	0502.5	0502.4	14.5	4376.0D	423.0		
	650	GORK	S	0504.0E	0504 U	3.7D	3 5.00	D		
	100	GORK		0507.0E	0510.0		15000.0			
	200	GORK	4 S/F	0507.0E	0507.5	2.4D	340.0			
	100	GORK	46 C	0507.0E	0508.2	10.2D	1200.0D			
	650	GORK	29 PBI	0507.6	0507.7	11.9	6.5			
	1000	TYKW	29 PBI	0510.0		45.0	2	1		
	3750	TYKW	5 S	0545.0	0546.4	3.0	2.5	1		
	606	LEAR	8 S	0549.8	0550.5	1.3	25			
	9395	PEKG	42 SER	0704.0	0706.2	3.2	26.0	9.0		
	430	KRAK		0716.0E	1209.0		70.0			
	430	KRAK		0716.0E	1010.0		140.0			
	430	KRAK	42 SER	0716.0E	0801.5	347.0D	330.0			
	410	LEAR	8 S	0741.3	0741.8	.8	11			
	3000	IZMI	5 S	0746.0	0746.6	.6	88	68		
	5200	BERN	45 C	0756.0	0808.7	25.0	93.0			
	11800	BERN	45 C	0756.6	0809.3	18.0	55.0			
	3200	BERN	45 C	0757.2	0808.8	25.0	78.0			
	9100	GORK	23 GRF	0800.0	0843.9	160.0E	40.0			
	9375	YUNN	3 S	0800.0	0809	12.0				RIF 18.7
	2963	YUNN	45 C	0800.0	0809	12.0				RIF 39.5
	8400	BERN	45 C	0800.6	0808.8	20.0	73.0			
	2840	PEKG	45 C	0801.0	0809	15.0	80.0	16.0		
	9395	PEKG	45 C	0801.0	0809	24.0	48.1	12.0		
	808	ONDR	41 F	0801.0	0840.6	89.0	48.0	17.0		
	2650	DWIN	45 C	0801.0	0809	9.0	70	30		
	930	BORD	40 F	0801.0	0803.6	14.0	20	5		
	950	GORK	4 C	0801.2E	0803.6	13.0D	6 2.20			
	950	GORK		0801.2	0808.3		14.0			
	650	GORK	21 GRF	0801.2		175.0D	5.0			
	3000	IZMI	7 C	0801.5	0809.0	9.5	88	30		
	2000	TYKW	45 C	0801.5	0803.5	11.0	37	11		
	2000	TYKW		0801.5	0809.5		37			
	1000	TYKW	45 C	0801.5	0803.6	11.0	30	14		
	3750	TYKW	45 C	0801.5	0808.8	11.0	85	16		
	9400	TYKW	45 C	0801.5	0808.8	11.0U	40 U	12 U		RAIN
	1415	MANI	47 GB	0801.5	0840.1	44.5D	1399			
	4995	MANI	47 GB	0801.6	0833.8	47.4D	230			
	500	HIRA	46 C	0801.6	0808.1	7.6	20	6		WL
	8800	MANI	47 GB	0801.6	0836.0	47.5	320			
	2695	MANI	47 GB	0801.6	0836.1	47.7D	91			
	2950	GORK	45 C	0801.7	0803.4	9.0	32.0			
	2950	GORK		0801.7	0808.8		75.0			
	3100	CRIM	42 SER	0801.6	0803.5	9.0	31	10		
	3100	CRIM		0801.8	0808.8		77	26		
	4995	LEAR	47 GB	0801.8	0808.8	8.5	92			
	606	MANI	47 GB	0801.8	0808.6	44.2D	40			
	9100	GORK	46 C	0801.9	0803.3	9.8	25.0			
	9100	GORK		0801.9	0809.0		43.0			
	200	GORK	46 C	0802.0	0807.8	112.5	280.0D			
	200	GORK		0802.0	0808.7		280.0			
	536	ONDR	42 SER	0802.0	0859.2	60.0	28.0			
	2695	LEAR	47 GB	0802.0	0808.8	8.1	84			
	200	HIRA	41 F	0802.0	0807.3	8.0	1000			0
	8800	ATHN	4 S/F	0802.1	0809.5	11.9	67			
	650	GORK		0802.2	0808.3		27.0			
	650	GORK	46 C	0802.2	0803.3	7.8	13.0			
	33	UPIC	46 C	0802.2	0802.7	5.7				
	100	HIRA	41 F	0802.2	0806.5	7.5	4600	890		
	127	TORN	47 GB	0802.2	0806.7	8.5	6700	340		
	1415	ATHN	4 S/F	0802.3	0804.3	10.5D	44			
	1415	LEAR	4 S/F	0802.3	0803.5	10.8	36			
	4995	ATHN	4 S/F	0802.3	0809.5	11.7D	83			
	29	UPIC	46 C	0802.3	0803	4.6				
	2695	ATHN	4 S/F	0802.3	0809.6	10.0D	71			
	8800	LEAR	47 GB	0802.5	0808.8	7.8	63			
	606	LEAR	47 GB	0802.6	0808.3	7.5	45			
	15400	LEAR	47 GB	0802.8	0809.8	10.5	39			
	410	LEAR	4 S/F	0803.0	0803.1	6.8	22			
	100	GORK		0803.0E	0813.6		200.0			
	100	GORK	41 F	0803.6E	0808.5	15.0D	3800.0			
	204	IZMI	41 F	0803.5	0807.5	12.5	550			
	15000	KISV	46 C	0806.0	0815	14.0	28			
	15000	KISV		0806.0	0809.3		11			
	245	LEAR	47 GB	0806.6	0807.1	1.0	620			
	5730	IRKU	20 GRF	0807.0	0808.9	3.0	54	18		L
	1000	TYKW	45 C	0812.6	0813.1	2.0	12	1		
	2000	TYKW	45 C	0812.8	0813.0	2.5	3	1		
	19600	BERN	21 GRF	0824.2	0835.5	300.0	116.0			
	3200	BERN	21 GRF	0826.0	0835.6	270.0	98.0			
	1000	TYKW	45 C	0827.0	0840.5	16.0D	160	20 D		

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04	11800	BERN	21 GRF	0827.6	0835.5	300.0	160.0			
	5200	BERN	21 GRF	0827.6	0835.6	270.0	150.0			
	8400	BERN	21 GRF	0827.6	0835.5	270.0	196.0			
	2840	PEKG	45 C	0828.0	0835.8	17.0	104.2	36.0		
	950	GORK	21 GRF	0828.0	1021.0	134.0	1.9	.4		
	950	GORK	21 GRF	0828.0	1021.0	134.0E	19.0	4.0		
	3750	TYKW	45 C	0828.0	0833.7	15.0D	115	45 D		
	9400	TYKW	45 C	0828.0	0833.7	15.0D	130	50 D		RAIN
	100	GORK		0828.3	0836.0		4450.0			
	100	GORK	41 F	0828.3	0832.7	8.6	85.0			
	9395	PEKG	45 C	0829.0	0835.8	16.0	173.0	70.0		
	2963	YUNN	45 C	0829.0	0836	14.0				RIF 53.6
	9375	YUNN	45 C	0829.0	0836	14.0				RIF 56.
	4995	ATHN	4 S/F	0829.1	0835.3	25.2D	139			
	650	GORK	40 F	0829.2	0839.7	13.3	19.0			
	8800	ATHN	4 S/F	0829.5	0835.6	24.0	66			
	2950	GORK	45 C	0830.0	0835.7	15.4	24.0			
	2950	GORK		0830.0	0837.7		19.0			
	2950	GORK		0830.0	0839.4		19.0			
	15000	KISV		0830.0	0837.6		50			
	15000	KISV		0830.0	0839.5		32			
	15000	KISV	46 C	0830.0	0835.7	20.0	76			
	2650	DWIN	45 C	0830.0	0836	15.0	85	60		
	15000	KISV		0830.6	0833.7		56			
	3100	CRIM	3 S	0830.0	0835.5	13.0	92	31		
	2000	TYKW	45 C	0830.0	0839.5	13.0D	77	35 D		
	4995	LEAR	47 GB	0830.1	0835.6	21.5	150			
	15400	LEAR	47 GB	0830.1	0835.6	18.7	110			
	2695	LEAR	47 GB	0830.1	0835.6	20.9	100			
	8800	LEAR	47 GB	0830.1	0835.6	21.5	200			
	9100	GORK		0830.3	0837.4		110.0			
	9100	GORK		0830.3	0835.6		160.0			
	9100	GORK	46 C	0830.3	0833.5	12.8	130.0			
	5730	IRKU	21 GRF	0830.3	0835.8	15.0	103	45		R
	5730	IRKU		0830.3	0837.9		70			R
	5730	IRKU		0830.3	0839.4		63			R
	2695	ATHN	4 S/F	0830.5	0835.3	24.5D	87			
	3000	IZMI	22 GRF	0831.0	0836.0	14.0	104	60		
	1415	ATHN	47 GB	0831.3	0840.1	25.0D	750			
	1415	LEAR	47 GB	0832.5	0840.3	15.8	2100			
	950	GORK	4 S/F	0834.0	0840.5	7.9	80.0			
	930	BORD	46 C	0834.6	0840.6	8.4	71	11		
	810	KRAK	41 F	0835.0	0840.8	7.5	20.0	9.0		
	200	GORK	2 S/F	0835.5	0836.8	1.6	40.0			
	3100	CRIM	29 PBI	0843.0	0843.0	137.0	20			
	9395	PEKG	29 PBI	0845.0		30.0	28.0	19.0		
	810	KRAK	8 S	0924.8	0924.9	.2	8.0			
	950	GORK	4 S/F	0959.5	1001.2	2.4	335.0			
	930	BORD	46 C	0959.6	1000.6	9.4	382	8		
	6100	KISV		0959.7	1007.5		18			
	6100	KISV	45 C	0959.7	1001.4	20.0	44			
	3100	CRIM		1000.0	1067.3	11.0	38	12		
	2963	YUNN	7 C	1000.0	1008	24.0				RIF 21.7
	9375	YUNN	30 PBI	1000.0	1001	12.0				RIF 20.5
	3100	CRIM	42 SER	1000.0	1001.5		25			
	2650	DWIN	45 C	1000.0	1001	10.0	35	20		
	536	ONDR	46 C	1000.0		13.0	43.0D	6.0		
	650	GORK		1000.0	1006.7		175.0			
	650	GORK	46 C	1000.0		11.2				
	808	ONDR	45 C	1000.0	1001.2	10.0	75.0D	10.0		
	1415	LEAR	4 S/F	1000.1	1000.6	3.7	220			
	9100	GORK	4 S/F	1000.2	1001.3	2.9	70.0			
	606	LEAR	4 S/F	1000.3	1001.1	2.8	139			
	410	LEAR	47 GB	1000.8	1001.1	2.2	62			
	2695	LEAR	47 GB	1001.1	1003.1	2.7	31			
	245	LEAR	8 S	1004.1	1005.0U	.9D	26.U			
	810	KRAK	42 SER	1004.5	1009.0	5.2	140.0U			
	9100	GORK	1 S	1006.0	1007.5	4.5	20.0	10.0		
	2800	OTTA	20 GRF	1130.0	1145	260.0D	16.0			
	9400	HUAN	1 S	1643.8	1645.1	3.4	10.6	5.6		0
	2800	OTTA	8 S	1806.8	1807	.6	4.2	2.1		
	2800	OTTA	240 R	1915.0	1930	15.0	3.2	1.6		
	2800	OTTA	240 R	2120.0	2125	5.0	3.2	1.2		
	3750	TYKW	21 GRF	2150.0	2230	110.0	9	5		
	2000	TYKW	21 GRF	2155.0	2230	105.0	5	2.5		
	2695	PENT	21 GRF	2155.0	2235	105.0	7.4	3.7		
	2695	PENT	3 S	2200.0	2201.8	6.0	26.8	6.7		
	3750	TYKW	5 S	2200.6	2201.6	10.0	37	6		
	9400	TYKW	45 C	2200.0	2201.6	5.0	28	9		RAIN
	2000	TYKW	5 S	2200.0	2201.6	4.0	15	3.5		
	9400	HUAN	2 S/F	2200.1	2201.8	3.6	22.9	13.2		0
	4995	PALE	4 S/F	2200.6	2201.6	2.4	36			
	1415	PALE	4 S/F	2200.6	2201.6	2.2	10			
	1000	TYKW	45 C	2201.0U	2201.8	3.0U	4 U	1 U		
	2695	PALE	8 S	2201.1	2201.8	1.2	28			

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04	8800	PALE	8	S	2201.1	2201.6	1.4	32			
	9400	TYKW	29	PBI	2205.0		95.0	10	5		
	100	HIRA	41	F	2207.1	2211.2	18.7	90			
	200	HIRA	41	F	2210.9	2211.2	6.6	22			0
	3750	TYKW	5	S	2310.0	2313.0	5.0	9	4		
	200	VORO	4	S/F	2310.0	2312	4.0	200 D			
	200	HIRA	46	C	2310.3	2313.1	4.0	300	50		
	2695	LEAR	4	S/F	2310.5	2312.8	5.0	19			
	2695	PENT	1	S	2311.0	2313	5.0	7.6	3.4		
	100	HIRA	46	C	2311.0	2314.2U	7.1	100 D			
	2000	TYKW	45	C	2311.0	2312.8	7.0	11	3		
	1000	TYKW	45	C	2311.5	2314.7	4.0	7	3		
	410	PALE	4	S/F	2312.1	2314.1	3.2	20			
	1415	PALE	4	S/F	2312.1	2312.8	3.2	10			
	500	HIRA	45	C	2312.2	2312.4	2.7	14	5		WL
	410	LEAR	4	S/F	2312.3	2312.8	2.7	20			
	245	PALE	4	S/F	2312.3	2312.8	2.2	390			
	245	LEAR	8	S	2312.5	2312.8	2.0	360			
	606	LEAR	8	S	2312.6	2313.1	.7	110			
	606	PALE	8	S	2312.6	2313.1	.5	130			
	2695	PALE	8	S	2312.6	2312.6	.2	15			
	2695	LEAR	8	S	2313.6	2313.6	.7	15			
	3750	TYKW	29	PBI	2315.0		15.0	3	1		
05	245	LEAR	43	NS	0030.0	0053.5	165.0	46			
	260	ONDR	44	NS	0644.0E		447.0D	47.0			
	208	VORO	44	NS	2200.6E		360.0D		16		
	606	LEAR	4	S/F	0003.6	0007.1	4.7	11			
	1000	TYKW	5	S	0004.5	0004.7	.7	10	3		
	2000	TYKW	28	PRE	0020.0	0040.3	26.0	10	4.5		
	3750	TYKW	28	PRE	0020.0	0040.5	26.0	9	5		
	2695	PENT	23	GRF	0020.0	0040	70.0	9.2	4.6		
	1000	TYKW	28	PRE	0030.0	0042.8	16.0	16	5		
	9400	TYKW	28	PRE	0030.0	0052	22.0	6	3		RAIN
	606	LEAR	8	S	0030.1	0031.1	2.0	36			
	606	PALE	8	S	0031.0	0031.1	.8	37			
	1415	PALE	47	GB	0041.5	0042.6	3.3	17			
	3659	YUNN	30	PBI	0042.0	0059	29.0				RIF 47.2
	2963	YUNN	30	PBI	0042.0	0059	30.0				RIF 25.3
	9375	YUNN	20	GRF	0044.0	0058	28.0				RIF 12.3
	2930	VORO	45	C	0045.0	0058	30.0	69			
	3750	TYKW	45	C	0046.0	0057.4	30.0	67	25		
	1000	TYKW	45	C	0046.0	0053.2	20.0	21	7		
	2000	TYKW	45	C	0046.0	0057.3	30.0	47	15		
	2695	LEAR	4	S/F	0046.3	0057.1	17.2	59			
	2695	PENT	3	S	0046.5	0057.5	25.0	64.0	25.8		
	4995	LEAR	4	S/F	0046.6	0057.1	17.4	53			
	8800	LEAR	4	S/F	0047.5	0057.1	14.3	30			
	1415	LEAR	4	S/F	0047.8	0056.5	9.7	17			
	2695	PALE	4	S/F	0048.8	0058.6	17.3	60			
	4995	PALE	4	S/F	0049.0	0057.6	19.0	49			
	8800	PALE	4	S/F	0049.3	0051.5	16.7	15			
	15400	LEAR	4	S/F	0051.3	0059.0	10.0	11			
	1415	PALE	4	S/F	0051.3	0053.5	14.8	15			
	9400	TYKW	5	S	0052.0	0058	25.0	25	10		
	2840	PEKG	3	S	0056.0	0108	25.0	57.2	23.0		
	15400	PALE	4	S/F	0057.3	0058.6	8.7	16			
	9395	PEKG	20	GRF	0058.0	0107	28.0	31.0	17.0		
	3750	TYKW	29	PBI	0116.0		40.0	5	1.5		
	245	PALE	47	GB	0139.3	0139.5	.3	1000			
	245	LEAR	47	GB	0139.5	0139.6	.3	930			
	1000	TYKW	45	C	0208.0	0215.0	10.0	210	50		
	410	LEAR	8	S	0216.1	0216.3	1.5	21			
	1000	TYKW	45	C	0221.0	0224.9	7.0	160	25		
	245	LEAR	8	S	0256.1	0256.1	.2	500			
	3750	TYKW	5	S	0548.5	0550.0	3.0	5	1		
	2000	TYKW	5	S	0549.0	0550	2.0	1.5	.5		
	3100	CRIM	26	FAL	0636.0	1024.0		9			
	1000	TYKW	45	C	0732.3	0733.4	1.5	7	2		
	245	LEAR	8	S	0733.0	0734.6	1.8	45			
	650	GORK	1	S	0733.0	0733.5	.7	3.5	6.0		
	204	IZMI	41	F	0737.0	0739.5	5.0	85			
	245	LEAR	4	S/F	0810.0	0810.3	2.1	45			
	606	LEAR	8	S	0843.8	0844.0	.3	25			
	245	LEAR	8	S	0850.6	0850.8	.2	18			
	810	KRAK	49	GB	0855.0	0915.5U	36.5	1000.0D	200.0		
	810	KRAK			0855.0	0920 U		1000.0D			
	245	LEAR	8	S	0939.1	0939.5	.7	200			
	2800	OTTA	20	GRF	1350.0	1455	180.0	6.4	4.2		
	930	BORD	46	C	1655.4	1655.9	1.0	30	5		
	9400	HUAN	1	S	1710.1	1712.0	3.9	9.7	5.1		0
	1415	PALE	8	S	1723.3	1724.1	1.3	13			
	2800	OTTA	21	GRF	1845.0	1945	230.0	9.8	5.0		
	245	PALE	4	S/F	1925.3	1925.8	2.2	80			
	245	PALE	8	S	2116.1	2116.8	1.0	34			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
05	2800	OTTA	21	GRF	2135.0	2150	40.0	9.6	4.8		
	2800	OTTA	3	S	2140.0	2142.5	5.0	15.8	7.6		
	9400	TYKW	45	C	2140.6	2146.8	10.0	13	8		
	200	HIRA	27	RF	2140.0	2158.4	376.0	31	10		WL
	3750	TYKW	45	C	2140.0	2142.7	10.0	18	10		
	500	HIRA	28	PRE	2140.0	2140.9	4.8	10	7		WR
	2000	TYKW	45	C	2140.0	2146.4	11.0	33	10		
	1000	TYKW	45	C	2140.0	2146.4	15.0	230	20		
	606	PALE	4	S/F	2141.0	2142.1	2.1	13			
	1415	PALE	8	S	2141.3	2142.3	1.7	19			
	2695	PALE	4	S/F	2141.3	2142.6	2.2	26			
	8800	PALE	8	S	2141.6	2142.6	1.4	27			
	4995	PALE	8	S	2141.6	2142.6	1.4	20			
	245	PALE	47	GB	2143.8	2144.5	14.5	880			
	200	HIRA	46	C	2144.0	2145.3	4.6	1200	145		0
	100	HIRA	46	C	2144.3	2144.4	3.3	2900	280		
	500	HIRA	46	C	2144.8	2147.4	4.5	135	70		WR
	410	PALE	47	GB	2145.0	2146.8	3.8	160			
	2800	OTTA	3	S	2146.0	2146.7	4.0	12.2	5.4		
	9400	TYKW	30	PBI	2150.0		25.0	8	3		
	3750	TYKW	30	PBI	2150.0		25.0	8	4		
	2000	TYKW	29	PBI	2151.0		30.0	5	2		
	200	VORO	29	PBI	2200.0E	2200	15.0D	30			
	3750	TYKW	31	ABS	2215.0	2245	135.0	-6	-3		
	9400	TYKW	31	ABS	2215.0	2300	125.0	-8	-4		
	2000	TYKW	5	S	2351.5	2352.3	2.0	1.5	.5		
	3750	TYKW	5	S	2351.5	2352.5	3.0	1.5	.5		
06	260	ONDR	44	NS	0630.0E		460.0D	27.0			
	3750	TYKW	21	GRF	0110.6	0210	145.0	3	1.5		
	2000	TYKW	21	GRF	0140.0	0220	120.0	2	1		
	2000	TYKW	45	C	0149.0	0149.8	2.0	9	1		
	3750	TYKW	45	C	0149.0	0149.8	5.0	14	1		
	1000	TYKW	45	C	0149.5	0150.3	1.5	6	1.5		
	1000	TYKW	5	S	0210.7	0211.2	1.0	2.5	.5		
	1000	TYKW	5	S	0215.9	0216.1	.6	1	.3		
	1000	TYKW	5	S	0217.0	0217.8	2.0	3	1		
	3750	TYKW	5	S	0306.7	0307.1	1.5	2	.7		
	9400	TYKW	28	PRE	0345.0	0507	82.0	10	3		
	2000	TYKW	28	PRE	0440.0	0448	20.0	4	2		
	3750	TYKW	28	PRE	0440.0	0444	27.0	5	2.5		
	2950	GORK	20	GRF	0442.0	0509.8	90.0	8.0			
	2000	TYKW	5	S	0500.0	0520	50.0	7	5		
	3750	TYKW	45	C	0507.0	0509.8	23.0	9	6		
	9400	TYKW	5	S	0507.0	0509.9	23.0	22	13		
	4995	ATHN	4	S/F	0507.6	0510.0	9.9D	19			
	9100	GORK	22	GRF	0508.0	0510.0	22.6	12.0			
	8800	ATHN	4	S/F	0508.5	0509.8	9.0	56			
	8800	LEAR	8	S	0508.8	0509.8	1.7	24			
	9400	TYKW	30	PBI	0530.0		150.0D	9	5	D	
	3750	TYKW	30	PBI	0530.0		150.0D	6	3	D	
	2000	TYKW	30	PBI	0550.0		130.0D	4	2	D	
	9400	TYKW	5	S	0650.0	0650.7	2.0	4	1.5		
	9400	TYKW	20	GRF	0700.0	0712	30.0	4	2		
	2000	TYKW	20	GRF	0700.0	0712	55.0	2	1		
	2950	GORK	20	GRF	0700.0	0712.6	51.0	4.0			
	3750	TYKW	20	GRF	0701.6	0712	55.0	4	2		
	8800	LEAR	4	S/F	0702.0	0711.6	14.5	16			
	2950	GORK	20	GRF	0714.1	0742.0	76.0	11.0			
	650	GORK	21	GRF	0805.5		17.5	12.0			
	245	LEAR	8	S	0806.8	0807.0	.3	34			
	650	GORK	3	S	0814.5	0815.1	1.7	8.5			
	430	KRAK	3	S	0814.8	0815.2	1.0	25.0			
	3659	YUNN	22	GRF	0833.0	0846	43.0				RIF 8.
	2963	YUNN	20	GRF	0836.0	0841	21.0				RIF 6.
	127	TORN	41	F	0854.9	0906.4	16.0	200			
	950	GORK	21	GRF	0904.0	0930.0	18.5	4.0			
	930	BORD	46	C	0905.0	0909.6	9.0	13	5		
	606	LEAR	4	S/F	0905.6	0907.3	8.4	20			
	650	GORK	20	GRF	0905.6	0912.0	24.4	15.0	4.0		
	810	KRAK			0905.7	0912.0		17.0			
	810	KRAK	7	C	0905.7	0907.8	7.7	20.0	13.0		
	950	GORK	45	C	0906.3	0908.5	7.2	12.0			
	950	GORK			0906.3	0912.2		16.0			
	245	LEAR	8	S	0914.1	0914.3	.7	13			
	245	LEAR	4	S/F	0916.0	0916.8	4.1	56			
	430	KRAK	8	S	1024.0	1024.5	.7	28.0			
	430	KRAK	42	SER	1052.0	1052.5	8.0	90.0			
	2800	OTTA	8	S	1230.9	1231.1	.5	2.4	1.2		
	810	KRAK		SER	1233.5	1249.2	17.0	4.2	51.0		
	245	PALE	4	S/F	1834.6	1902.1	44.5	73			
	2800	OTTA	20	GRF	1900.0	1930	110.0	6.6	3.3		
	245	PALE	4	S/F	1958.8	2006.3	13.3	19			
	2800	OTTA	1	S	2203.6	2204	2.0	2.4	1.2		
	208	VORO	4	S/F	2220.0	2221.5	2.0	35			

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07	260	ONDR	44	NS	0636.0E		453.0D	50.0			
	127	TORN	43	NS	0720.0	1007.0	350.0D	700	1		V1 DISTURBED
	245	LEAR	43	NS	0737.0	0737.1	145.0D	45			
	200	HIRA	44	NS	2013.0E	0110	550.0D	7	2		WR
	410	PALE	43	NS	2018.6	0044.6	495.0	260			
	245	PALE	43	NS	2101.0	2150.1	452.0	139			
	208	VORO	44	NS	2200.0E		360.0D		10		
	2840	PEKG	28	PRE	0038.0	0116.6	386.0	8.0			
	9395	PEKG	4	S/F	0043.0	0104.2	25.6	78.0	17.0		
	2840	PEKG	1	S	0100.0	0118	37.0	59.0	23.0		
	9375	YUNN	3	S	0102.5	0103.5	5.0				RIF 19.
	9400	TYKW	28	PRE	0103.0	0104.0	12.0	80	10		
	3750	TYKW	28	PRE	0103.0	0113.6	12.0	7	3		
	17000	NOBE	3	S	0103.2	0104.0	2.0	93			R
	2930	VORO	3	S	0115.0	0119	15.0	140			
	3750	TYKW	5	S	0115.0	0118.7	13.0	160	35		
	9400	TYKW	45	C	0115.0	0118.6	8.0	128	30		
	2000	TYKW	5	S	0116.0	0118.6	9.0	40	10		
	3659	YUNN	3	S	0116.0	0117	8.0				RIF 44.
	9375	YUNN	2	S/F	0116.0	0117.5	5.0				RIF 27.
	9395	PEKG	3	S	0116.0	0118.7	11.0	19.0			
	5730	IRKU	2	S	0116.3	0118.7	6.0	180	54		L
	2963	YUNN	3	S	0117.0	0118.5	8.0				RIF 41.
	2695	PENT	3	S	0117.0	0118.7	6.0	90.0	30.0		
	17000	NOBE	1	S	0118.0	0118.6	2.5	17			R
	2840	PEKG	29	PBI	0122.4		88.0	100.0			
	9400	TYKW	29	PBI	0123.0		80.0	14	9		
	2000	TYKW	30	PBI	0125.0		75.0	4	2		
	3750	TYKW	30	PBI	0128.0		75.0	14	7		
	2000	TYKW	5	S	0140.0	0143	6.0	3	1.5		
	3750	TYKW	5	S	0140.0	0143	8.0	5	2		
	2840	PEKG	21	GRF	0327.2	0519	294.0D	12.0	23.0		
	2840	PEKG	45	C	0339.0	0432.6	76.0	52.0	14.0		
	2000	TYKW	28	PRE	0340.0	0404.0	38.0	7	3		
	3750	TYKW	28	PRE	0344.0	0404.0	36.0	11	4		
	1000	TYKW	28	PRE	0345.0	0416.1	33.0	5	2		
	650	GORK	23	GRF	0348.0E		222.0D	20.0			
	3659	YUNN	29	PBI	0349.0	0432	71.0				RIF 25.1
	9400	TYKW	28	PRE	0350.0	0424	34.0	10	4		
	2950	GORK	21	GRF	0359.0E		184.0D				
	200	GORK	21	GRF	0407.8		53.0				
	2000	TYKW	45	C	0418.0	0430.1	27.0	150	25		
	1000	TYKW	45	C	0418.0	0423.5	50.0	185	25		
	1415	MANI	47	GB	0418.5	0430.3	28.0D	100			
	2695	MANI	47	GB	0418.6	0430.1	19.5D	63			
	606	MANI	47	GB	0418.8	0423.3	34.2D	210			
	245	LEAR	4	S/F	0418.8	0418.8	31.2	53			
	200	HIRA	46	C	0419.3	0429.7	65.0	95	19		WR
	1415	ATHN	4	S/F	0419.8	0430.3	20.2D	110			
	3750	TYKW	45	C	0420.0	0432.4	20.0	46	23		
	500	HIRA	46	C	0420.2	0423.4	18.0	100	40		WLMR
	1415	LEAR	47	GB	0420.3	0430.3	29.7	139			
	606	LEAR	47	GB	0420.3	0423.3	29.7	270			
	650	GORK			0420.3	0430.3		45.0			
	650	GORK	46	C	0420.3	0423.5	14.7	170.0			
	200	GORK			0420.8	0429.6		170.0			
	200	GORK	46	C	0420.8	0426.8	21.0	80.0			
	100	GORK			0421.0	0432.0		1500.0D			
	100	GORK			0421.6	0433.6		1500.0D			
	100	GORK	46	C	0421.0	0429.0	16.0	82.0			
	410	LEAR	4	S/F	0421.1	0421.1	28.9	23			
	100	HIRA	7	C	0421.9	0432.1	59.0	2500	100		WR
	100	HIRA			0421.9	0447.0		95			WR
	4995	LEAR	47	GB	0422.6	0432.6	27.4	41			
	2695	LEAR	47	GB	0423.1	0430.0	26.9	68			
	2695	ATHN	4	S/F	0423.3E	0432.6	15.0D	79			
	4995	MANI	47	GB	0423.3	0428.1	13.8	26			
	9400	TYKW	45	C	0424.0	0430.6	16.0	27	21		
	8800	LEAR	47	GB	0424.1	0430.3	25.9	39			
	2950	GORK			0425.2	0432.5		86.0			
	950	GORK	46	C	0425.2	0430.7	97.0	78.0			
	950	GORK			0425.2	0436.0		41.0			
	2950	GORK	46	C	0425.2	0430.8	11.8	69.0			
	9100	GORK	22	GRF	0427.0	0432.6	97.0	14.0			
	15400	LEAR	47	GB	0429.8	0456.5	20.2	35			
	17000	NOBE	20	GRF	0431.7	0505.1	145.0	15			0
	950	GORK	29	PBI	0437.9	0438.0	29.0	18.0			
	500	HIRA	29	PBI	0438.2	0440.8	30.0	16	10		SL
	9400	TYKW	30	PBI	0440.0		200.0	25	12		
	3750	TYKW	30	PBI	0440.0		200.0	19	10		
	9400	TYKW	20	GRF	0440.0	0450	80.0	4	2		
	2000	TYKW	30	PBI	0445.0		210.0	13	6		
	245	LEAR	4	S/F	0450.1	0405.6	295.9	45			
	410	LEAR	4	S/F	0450.8	0455.5	9.3	25			

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				UT	UT	MINUTES	PEAK	MEAN		
07	2000	TYKW	21 GRF	0454.0	0525	170.0	5	2.5		
	3750	TYKW	20 GRF	0504.0	0520	110.0	4	1.5		
	245	LEAR	4 S/F	0505.5	0505.8	2.3	31			
	1000	TYKW	29 PBI	0508.0		130.0	6	3		
	245	LEAR	8 S	0627.3	0627.8	.7	20			
	2000	TYKW	45 C	0640.0	0645.2	10.0	3	1		
	3750	TYKW	5 S	0657.0	0702	25.0	4	1.5		
	9400	TYKW	5 S	0657.0	0702	20.0	3	1.5		
	2000	TYKW	5 S	0657.6	0702	20.0	2	1		
	245	LEAR	4 S/F	0732.1	0732.3	2.2	110			
	3100	CRIM	26 FAL	0820.0	0848.0		11			
	204	IZMI	5 S	1006.3	1006.3	1.0	130	90		
	29	UPIC	45 C	1006.5	1006.8	1.6				
	33	UPIC	45 C	1006.5	1006.8	1.6				
	33	UPIC	4 S/F	1020.5	1020.6	.5				
	204	IZMI	41 F	1020.5	1020.5	3.0	55			
	29	UPIC	4 S/F	1020.6	1020.8	.4				
	33	UPIC	4 S/F	1226.1	1226.2	.5				
	29	UPIC	4 S/F	1226.3	1226.4	.5				
	930	BORD	42 SER	1315.1	1315.2	2.7	33	2		
	33	UPIC	4 S/F	1419.4	1419.5	.4				
	29	UPIC	2 S/F	1419.6	1420	.5				
	2800	OTTA	240AR	1455.0	1530	35.0	4.8	2.4		
	2800	OTTA	8 S	1456.0	1456.2	.3	4.8	2.4		
	930	BORD	41 F	1456.0	1456.1	.8	58	2		
	930	BORD	42 SER	1540.0	1542.4	7.0	229	3		
	2800	OTTA	40 F	1541.0	1541.5	4.3	9.8			
	2695	ATHN	4 S/F	1541.1	1541.5	5.7D	09			
	4995	ATHN	4 S/F	1541.1	1541.6	5.7D	08			
	8800	ATHN	8 S	1541.3	1541.6	.8	05			
	3200	BERN	20 GRF	1603.3	1604.2	30.0				ONLY PAPER REC
	5200	BERN	20 GRF	1603.3	1604.2	30.0	12.0			
	2800	OTTA	21 GRF	1603.7	1604.5	12.0	9.2	3.0		
	2800	OTTA	8 S	1605.5	1606	.6	2.4	1.2		
	930	BORD	41 F	1617.8	1618	.2	13	2		
	2800	OTTA	1 S	1826.6	1826.6	1.5	8.8	4.0		
	2800	OTTA	21 GRF	1834.3	1835	12.0	5.8	2.6		
	2800	OTTA	8 S	1839.8	1839.9	.2	5.8			
	2800	OTTA	20 GRF	1950.0	1954	15.0	3.0	1.5		
	2695	PENT	41 SER	2012.0	2015.5	6.0	10.6			
	2695	PENT		2012.0	2013.7	2.0	5.4	2.4		
	2695	PALE	8 S	2015.0	2015.5	.8	13			
	1415	PALE	8 S	2015.0	2015.5	.8	13			
	2695	PENT		2015.3	2015.5	.8	10.6	5.3		
	2800	OTTA		2016.4	2017	1.6	6.4	2.8		
	2695	PENT	240 R	2120.0	2245	95.0	7.6	3.6		
	245	LEAR	8 S	2250.8	2251.0	.5	92			
	410	LEAR	8 S	2250.8	2251.1	.5	24			
	606	LEAR	8 S	2250.8	2251.1	.3	20			
	606	LEAR	8 S	2258.6	2258.8	.5	10			
	410	LEAR	8 S	2258.6	2258.8	.5	25			
	245	LEAR	8 S	2258.6	2258.8	.5	35			
	15400	PALE	8 S	2306.1	2306.3	1.4	57			
08	245	LEAR	43 NS	0203.0	0545.8	478.0D	36			
	200	GORK	44 NS	0415.0E		495.0D		5.0		
	100	GORK	43 NS	0456.0		634.0D		5.0		
	127	TORN	44 NS	0600.0E	0832.2	540.0D	540	2		V1 DISTURBED
	260	ONDR	44 NS	0630.0E		412.0D	51.0			
	245	SGMR	43 NS	1530.0	1721.1	210.0D	460			
	410	SGMR	43 NS	1721.0	1732.0	99.0D	18			
	208	VORO	44 NS	2200.0E		360.0D		24		
	245	LEAR	43 NS	2251.6E	0254.8	618.5D	53			
	410	LEAR	4 S/F	0003.1	0006.1	11.4	55			
	245	LEAR	8 S	0032.8	0033.0	.3	20			
	3750	TYKW	45 C	0040.5	0044.7	6.0	26	6		
	3750	TYKW	21 GRF	0040.5	0117	205.0	6	3		
	9400	TYKW	45 C	0041.0	0044.8	10.0	82	5		
	500	HIRA	46 C	0041.3	0041.8	1.0	25	10		0
	1000	TYKW	5 S	0041.5	0042.3	2.0	3	1		
	2000	TYKW	5 S	0041.5	0042.3	2.0	10	4		
	2695	PENT	41 SER	0041.5	0044.5	3.5	25.4			
	2695	PENT		0041.5	0042.3	1.2	15.2	7.6		
	8800	LEAR	47 GB	0041.6	0044.6	3.4	74			
	4995	LEAR	8 S	0041.6	0042.3	.9	24			
	4995	PALE	8 S	0041.6	0042.1	.2	17			
	410	LEAR	47 GB	0041.8	0044.6	3.0	710			
	2695	LEAR	8 S	0041.8	0042.3	.7	18			
	1415	LEAR	4 S/F	0042.1	0044.8	2.7	24			
	606	LEAR	47 GB	0042.3	0044.6	2.3	740			
	9375	YUNN	1 S	0043.0	0044	2.0				RIF 6.
	17000	NOBE	20 GRF	0043.3	0044.7	7.0	11			0
	500	HIRA	46 C	0044.0	0044.4	.6	700	300		WR
	2695	PENT		0044.0	0044.5	1.0	25.4	12.0		
	2000	TYKW	45 C	0044.3	0044.7	2.5	26	5		

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08	1000	TYKW	45 C	0044.3	0044.7	2.5	25	5		
	606	PALE	47 GB	0044.3	0044.6	.3	990			
	1415	PALE	8 S	0044.3	0044.6	.5	36			
	15400	LEAR	8 S	0044.3	0044.6	.3	18			
	4995	PALE	8 S	0044.5	0044.6	.3	24			
	410	PALE	8 S	0044.5	0044.6	.3	260			
	245	LEAR	8 S	0044.6	0044.8	.4	35			
	2000	TYKW	21 GRF	0055.0	0117	190.0	4.5	2		
	410	PALE	8 S	0128.3	0128.6	.5	210			
	2840	PEKG	7 C	0134.0	0144	16.0	23.0	6.3		
	245	LEAR	8 S	0223.0	0223.6	1.1	60			
	2000	TYKW	5 S	0223.6	0224	3.0	1.5	.5		
	3750	TYKW	5 S	0223.0	0223.3	3.0	4	1		
	100	HIRA	46 C	0223.1	0223.7	1.1	260	80		WR
	410	LEAR	8 S	0223.3	0223.3	.2	39			
	3659	YUNN	7 C	0236.0	0237	2.0				RIF 5.4
	3659	YUNN	7 C	0303.0	0304	5.0				RIF 4.5
	3750	TYKW	45 C	0304.0	0306.0	5.0	13	5		
	4995	LEAR	4 S/F	0305.3	0356.8	4.7	01			
	2695	LEAR	4 S/F	0305.3	0306.8	4.7	11			
	3750	TYKW	29 PBI	0309.0		40.0	3	1.5		
	2000	TYKW	29 PBI	0309.0U		30.0U	2	1		
	1000	TYKW	45 C	0313.4	0313.5	2.0	4	1		
	1415	PALE	8 S	0324.5	0324.8	.1	17			
	410	LEAR	8 S	0337.1	0337.1	.4	28			
	3750	TYKW	20 GRF	0412.0	0420	50.0	2 U	1 U		INTERFERENCE
	2000	TYKW	20 GRF	0412.0	0420	50.0	2 U	1 U		
	500	HIRA	8 S	0415.9	0416.0	.2	64000			SR
	2000	TYKW	21 GRF	0520.0	0525	40.0	2	1		
	3750	TYKW	45 C	0520.0	0542.0	40.0	5	2		
	9400	TYKW	20 GRF	0520.0	0545	50.0	4	2		
	500	HIRA	42 SER	0540.4	0543.0	5.0	800			WL
	410	LEAR	4 S/F	0540.8	0543.3	4.3	390			
	1000	TYKW	42 SER	0541.0	0543.2	6.0	94	3		
	2000	TYKW	45 C	0541.0	0543.3	5.0	14	4		
	1415	LEAR	4 S/F	0541.1	0543.3	3.9	16			
	650	GORK	23 GRF	0541.6	0544.3	9.4	15.0			
	2950	GORK	1 S	0541.8	0542.0	6.0	3.0	1.5		
	950	GORK	4 S/F	0543.6	0543.2	1.9	92.0			
	650	GORK	8 S	0543.1	0543.2	.4	53.0			
	606	LEAR	8 S	0543.1	0543.3	1.7	450			
	1000	TYKW	8 S	0548.9	0549.0	.2	3	.7		
	1000	TYKW	8 S	0551.9	0552.0	.2	16	4		
	2840	PEKG	1 S	0625.0	0630	15.0	7.1	2.1		
	2000	TYKW	5 S	0629.5	0630.1	2.5	4	1.5		
	2950	GORK	1 S	0629.7	0630.3	4.7	8.0	4.0		
	3750	TYKW	5 S	0629.8	0630.2	3.0	4.5	1.5		
	2950	GORK	20 GRF	0721.0	0725.2	15.0	5.0	2.5		
	410	LEAR	8 S	0724.8	0725.1	1.5	25			
	606	LEAR	8 S	0725.1	0725.3	1.2	10			
	650	GORK	2 S/F	0725.1	0725.8	1.8	3.5			
	950	GORK	3 S	0726.2	0826.4	.6	60.0			
	536	ONDR	41 F	0748.5	0757.5	16.0	10.0	3.0		
	410	LEAR	4 S/F	0755.1	0756.8	2.5	110			
	606	LEAR	8 S	0756.8	0756.8	.2	11			
	4995	ATHN	4 S/F	0841.6	0849.5	12.5	04			
	8800	ATHN	4 S/F	0905.1	0906.0	7.2	09			
	9100	GORK	20 GRF	0949.4	1147.0	130.0E	14.0			
	2950	GORK	21 GRF	1023.2	1026.5	107.0E	5.0	2.5		
	3100	CRIM	20 GRF	1024.5	1027.6	9.0	11	4		
	650	GORK	2 S/F	1024.7	1027.7	5.3	3.5			
	536	ONDR	42 SER	1025.0	1033	6.5	22.0			
	2650	DWIN	1 S	1025.0	1027	5.0	10	5		
	2950	GORK	1 S	1026.7	1027.7	3.0	9.0	4.5		
	930	BORD	41 F	1031.8	1032	.4	13	2		
	4995	ATHN	4 S/F	1233.6	1234.1	5.0D	08			
	8800	ATHN	4 S/F	1233.6	1237.3	5.2	16			
	430	KRAK	47 GB	1252.0	1258.5	9.0	700.0D			
	536	ONDR	42 SER	1256.3	1259.2	22.0	42.0	4.0		
	260	ONDR	46 C	1256.4		7.0D	219.0D	47.0		
	410	SGMR	47 GB	1256.5	1258.8	4.8D	610			
	228	HARS	48 C	1256.5	1301.0	7.1	350	55		
	245	SGMR	47 GB	1256.6	1258.3	6.0D	620			
	5200	BERN	1 S	1257.3	1259.0	3.0	43.0			ONLY PAPER REC
	11800	BERN	1 S	1257.3	1259.0	3.0	102.0			ONLY PAPER REC
	3200	BERN	1 S	1257.3	1259.0	3.0				ONLY PAPER REC
	2695	SGMR	4 S/F	1257.5	1259.1	2.8D	24			
	810	KRAK	3 S	1257.5	1259.5	2.3	19.0	9.0		
	606	SGMR	4 S/F	1257.6	1259.0	2.5D	110			
	1415	ATHN	4 S/F	1257.6	1258.6	4.5D	45			
	4995	SGMR	4 S/F	1257.8	1259.1	1.9D	55			
	930	BORD	45 C	1257.8	1259	3.2	25	5		
	2695	ATHN	4 S/F	1257.8	1259.1	4.5D	22			
	808	ONDR	2 S/F	1258.0	1259.6	5.0D	20.0	11.0		
	2650	DWIN	1 S	1258.0	1259	2.0	25	15		

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08	1415	SGMR	4	S/F	1258.0	1258.8	2.5D	45			
	4995	ATHN	4	S/F	1258.1	1259.1	4.0D	52			
	8800	ATHN	4	S/F	1258.1	1259.1	7.2	130			
	2800	OTTA	3	S	1258.3	1259.2	1.7	21.2	10.0		
	8800	SGMR	8	S	1258.5	1259.3	1.6D	130			
	15400	SGMR	8	S	1258.8	1259.1	1.8	87			
	127	TORN	47	GB	1300.1	1300.9	7.0	6300	290		
	2800	OTTA	21	GRF	1430.0	1525	100.0	5.0	2.6		
	2800	OTTA	1	S	1434.5	1436	2.5	2.4	1.2		
	2800	OTTA	1	S	1549.0	1550	2.5	2.8	1.2		
	930	BORD	3	S	1550.0	1550.3	.9	26	8		
	245	SGMR	8	S	1556.5	1557.0	1.0	320			
	2800	OTTA	21	GRF	1615.0	1830	575.0	51.0			
	606	SGMR	8	S	1615.6	1616.5	1.4D	110			
	1415	SGMR	8	S	1616.6	1617.0	2.0D	13			
	410	SGMR	8	S	1616.1	1616.1	.2D	18			
	4995	SGMR	8	S	1616.1	1617.0	2.0D	11			
	8800	SGMR	8	S	1616.1	1617.1	2.0	25			
	2695	SGMR	8	S	1616.1	1616.8	2.0D	13			
	2800	OTTA	21	GRF	1623.0	1703	92.0	44.8	25.0		
	930	BORD	46	C	1623.7	1701.7	55.0	174	30		
	2650	DWIN	45	C	1624.0	1637	25.0	220			
	2800	OTTA	45	C	1624.0	1624.6	7.5	47.4	23.7		
	11800	BERN	45	C	1625.0	1638.7	60.0D	100.0			
	5200	BERN	45	C	1625.6	1637.3	60.0D	116.0			
	3200	BERN	45	C	1625.6	1637.3	60.0D	144.0			
	8400	BERN	45	C	1625.6	1637.2	60.0D	79.0			
	8800	ATHN	4	S/F	1631.6	1637.8	20.7D	23			
	4995	ATHN	4	S/F	1632.1	1637.8	20.2D	100			
	2800	OTTA	4	S/F	1634.3	1637.3	7.4	188.0	58.6		
	1415	ATHN	4	S/F	1635.0	1637.6	17.3D	98			
	2695	ATHN	4	S/F	1635.3	1637.8	17.0D	270			
	2800	OTTA	40	F	1645.7	1648.5	30.0	34.0			
	245	PALE	47	GB	1705.6E	1714.5	40.5D	500			
	410	PALE	47	GB	1705.6E	1707.8	40.5D	130			
	2800	OTTA	1	S	1739.5	1740.5	4.0	4.8	2.4		
	606	SGMR	8	S	1758.1	1758.8	1.0	180			
	245	SGMR	47	GB	1758.3	1758.6	.7D	560			
	410	SGMR	8	S	1758.5	1758.8	.8D	160			
	15400	PALE	4	S/F	1830.1	1832.3	2.4	24			
	15400	PALE	8	S	1835.1	1837.0	.2	25			
	245	PALE	8	S	1836.6	1837.0	1.0	60			
	245	PALE	47	GB	1840.8	1905.8	30.7	760			
	15400	PALE	8	S	1847.1	1847.1	.2	31			
	410	PALE	8	S	1910.6	1910.8	.7	20			
	410	PALE	4	S/F	1915.1	1918.1	3.2	35			
	245	PALE	8	S	1917.3	1917.5	.3	51			
	2800	OTTA	1	S	1925.5	1928	6.0	5.0	2.5		
	245	PALE	47	GB	1955.8	2052.6	97.5	50000			
	2800	OTTA	4	S/F	1956.0	1957.9	9.0	14.8	6.2		
	410	PALE	47	GB	1956.8E	2050.6	96.5D	1600			
	606	PALE	47	GB	1957.5	2050.5	95.8	22000			
	2695	PENT	2	S/F	2006.0	2007	1.2	4.0			
	200	HIRA	48	C	2012.0E	2057	160.0D	12000	700		WR
	100	HIRA	48	C	2012.0E	2034	450.0D	3000	430		0
	2800	OTTA	22	GRF	2030.0	2032	13.0	9.8	7.0		
	500	HIRA	48	C	2046.7	2052.6	45.0	26000	5000		MRSL
	2800	OTTA	46F	C	2047.0	2050.6	26.0	179.0	55.0		
	2695	PALE	4	S/F	2047.1	2050.6	46.2	200			
	1415	PALE	47	GB	2047.1	2050.3	46.2	1399			
	1000	TYKW	47	GB	2048.0E	2050.6	52.0D	2500 U	200 U		
	2000	TYKW	45	C	2050.0E	2050.9	45.0D	310 U	60 U		
	3750	TYKW	30	PBI	2110.0E		320.0D	20 D	8 D		
	9400	TYKW	30	PBI	2115.0E		315.0D	30 D	12 D		
	2000	TYKW	30	PBI	2135.0		285.0	20	7		
	1000	TYKW	30	PBI	2140.0		240.0	10	5		
	2930	VORO	3	S	2215.0	2218	10.0	65			
	606	PALE	8	S	2308.6	2308.8	.5	220			
	606	LEAR	8	S	2308.6	2308.8	.3	160			
	410	LEAR	8	S	2308.8	2308.8	.3	65			
	410	PALE	8	S	2316.6	2316.8	.2	35			
	245	PALE	8	S	2316.6	2316.8	.2	55			
	245	LEAR	8	S	2316.6	2316.8	.2	21			
	410	LEAR	8	S	2316.6	2316.8	.2	53			
	17000	NOBE	20	GRF	2326.6	2329.5	16.0	23			0
	9400	TYKW	45	C	2327.0	2330.1	8.0	19	3.5		
	3750	TYKW	45	C	2328.0	2330.1	4.0	5	1.5		
	2000	TYKW	45	C	2328.0	2330.1	4.0	6	2		
	245	PALE	8	S	2328.3	2328.5	.3	25			
	606	PALE	8	S	2328.3	2328.6	.3	130			
	1000	TYKW	45	C	2328.5	2328.9	3.5	145	5		
	606	LEAR	8	S	2328.6	2328.6	.2	130			
	606	LEAR	8	S	2341.8	2341.8	.2	08			
	410	LEAR	8	S	2341.8	2341.8	.2	24			
	410	PALE	47	GB	2352.3	2352.6	.5	1700			

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08	245	PALE	8	S	2352.3	2352.6	.5	200				
	606	PALE	47	GB	2352.3	2352.6	.5	4700				
	3750	TYKW	5	S	2352.4	2352.7	.8	10	2.5			
	2695	PENT	8	S	2352.5	2352.7	.8	8.4	2.8			
	1000	TYKW	5	S	2352.6	2352.7	1.0	105	4			
	9400	TYKW	5	S	2352.6	2352.7	.6	19	5			
	2000	TYKW	5	S	2352.6	2352.7	1.0	6	2			
	3750	TYKW	21	GRF	2356.0	0013	35.0	4	2			
09	100	GORK	44	NS	0357.0E		117.0D		5.0			
	200	GORK	44	NS	0357.0E		530.0D		5.0			
	260	ONDR	43	NS	0635.0		453.0D	67.0				
	127	TORN	43	NS	0750.0	0756.2	490.0	90	1		V0	
	208	VORO	44	NS	2200.0E		360.0D		9			
	3750	TYKW	5	S	0020.5	0021.3	6.5	2.5	1			
	2000	TYKW	20	GRF	0030.0	0115	100.0	2	1			
	3750	TYKW	21	GRF	0036.0	0137	100.0	8	3.5			
	9400	TYKW	5	S	0044.5	0044.6	2.0	4	1.5			
	3750	TYKW	5	S	0055.5	0056.0	2.5	2	.7			
	9400	TYKW	21	GRF	0110.0	0138	60.0	7	3			
	3750	TYKW	5	S	0128.5	0129.0	2.5	5	1			
	9400	TYKW	5	S	0156.0	0157.1	3.0	6	1.5			
	2000	TYKW	5	S	0242.0	0243.2	3.0	5	2			
	3750	TYKW	5	S	0242.0	0243.2	3.0	6	2			
	2000	TYKW	29	PBI	0245.0		13.0	1	.5			
	3750	TYKW	29	PBI	0245.0		13.0	2.5	1.5			
	2840	PEKG	1	S	0251.0	0303	37.0	6.1				
	9400	TYKW	45	C	0300.0	0321	40.0	12	4			
	2000	TYKW	20	GRF	0301.0	0317	30.0	2	1			
	3750	TYKW	20	GRF	0303.0E	0321	30.0D	4	1.5D			
	1000	TYKW	5	S	0315.4	0315.7	.8	1.6	.4			
	1000	TYKW	5	S	0317.0	0317.2	1.0	25	5			
	1000	TYKW	45	C	0320.4	0320.8	.8	3.5	1			
	3659	YUNN	7	C	0340.0	0343	6.0				RIF	3.9
	3750	TYKW	20	GRF	0345.0	0355	30.0	6	2.5			
	9400	TYKW	21	GRF	0345.0	0450	130.0	10	4			
	2000	TYKW	21	GRF	0345.0	0440	130.0	3	1.5			
	2000	TYKW	20	GRF	0345.0	0356	30.0	3	1			
	3750	TYKW	21	GRF	0345.0	0450	130.0	6	2.5			
	9400	TYKW	20	GRF	0350.0	0355	35.0	3	1.5			
	1000	TYKW	8	S	0422.4	0422.5	.2	48	10			
	1000	TYKW	8	S	0425.2	0425.2	.1	21	4			
	9100	GORK	23	GRF	0428.0E	0643.8	450.0E	36.0				
	2950	GORK	21	GRF	0430.0	0450.7	450.0	20.0	10.0			
	3750	TYKW	21	GRF	0558.6	0620	100.0	4	2			
	9400	TYKW	21	GRF	0559.0	0620	100.0	6	3			
	2840	PEKG	7	C	0631.0	0653	36.0	25.0	6.4			
	9400	TYKW	5	S	0635.0	0643.7	30.0	12	4			
	9395	PEKG	20	GRF	0635.4	0643.8	22.6					
	930	BORD	41	F	0637.4	0637.6	.4	19	2			
	2000	TYKW	28	PRE	0640.0	0652	12.0	1	.5			
	3750	TYKW	28	PRE	0640.5	0641	11.5	1.5	1			
	1000	TYKW	8	S	0643.1	0643.3	.4	10	3			
	3200	BERN	4	S/F	0651.5	0653.1	5.0	18.0				
	3750	TYKW	45	C	0652.0	0653.1	4.0	20	7			
	2000	TYKW	5	S	0652.0	0653.1	4.0	11	3			
	5200	BERN	4	S/F	0652.0	0653.1	5.0	12.0				
	2950	GORK	45	C	0652.6	0653.1	3.5	24.0				
	2950	GORK	45	C	0652.6	0654.1		14.0				
	3100	CRIM	1	S	0652.8	0653.2	2.0	26	9			
	2650	DWIN	2	S/F	0653.0	0653	2.0	40	20			
	3750	TYKW	29	PBI	0656.0		25.0	5	1.5			
	2000	TYKW	29	PBI	0656.0		40.0	1	.5			
	9100	GORK	1	S	0828.7	0823.4	1.7	3.5				
	650	GORK	2	S/F	0937.8	0940.7	5.1	11.0				
	15000	KISV	8	S	0939.0	0940.8	4.0	74				
	3659	YUNN	3	S	0939.0	0940	3.0				RIF	12.
	9375	YUNN	3	S	0939.0	0940	11.0				RIF	29.
	35000	BERN	3	S	0939.3	0940.7	3.0	55.0				
	19600	BERN	3	S	0939.3	0940.6	3.0	105.0				
	5200	BERN	3	S	0939.5	0940.6	5.0	38.0				
	9100	GORK	3	S	0939.5	0940.6	3.9	112.0	40.0			
	3200	BERN	3	S	0939.6	0940.5	6.0	25.0				
	8400	BERN	3	S	0939.6	0940.6	6.0	92.0				
	11800	BERN	3	S	0939.6	0940.6	4.0	140.0				
	10715	DWIN	4	S/F	0940.0	0941	3.0	160	80			
	3100	CRIM	3	S	0940.0	0940.5	3.0	31	10			
	2650	DWIN	1	S	0940.0	0941	2.0	25	15			
	810	KRAK	8	S	0940.0	0940.0	.2	310.0				
	950	GORK	4	S/F	0940.0	0940.2	21.0	100.0				
	808	ONDR	8	S	0940.2	0940.4	.5	72.0				
	930	BORD	46	C	0940.2	0940.3	.6	229	4			
	127	TORN	2	S/F	0944.2	0944.7	1.0	50	40			
	2950	GORK	3	S	1040.0	1040.5	3.1	28.0	14.0			
	930	BORD	8	S	1107.4	1107.4	.1	12	1			

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09	127	TORN	7 C	1125.2	1125.9	1.5	80	30		
	650	GORK	2 S/F	1130.0	1133.0	8.1	3.0			
	930	BORD	8 S	1136.5	1136.5	.1	17	1		
	33	UPIC	45 C	1155.5	1157.7	4.3				
	29	UPIC	45 C	1157.1	1157.9	2.0				
	2800	OTTA	24OAR	1200.0	1253	53.0	9.8	4.9		
	930	BORD	8 S	1215.6	1215.6	.1	52	1		
	650	GORK	1 S	1227.0	1228.5	4.0	2.0			
	2800	OTTA	2 S/F	1228.6	1229.5	8.0	4.8	2.4		
	9400	HUAN	21 GRF	1228.7	1305.3	66.1	23.4	14.2		0
	11800	BERN	3 S	1233.0	1235.3	6.0	35.0			
	3200	BERN	3 S	1234.2	1235.4	10.0	7.0			
	5200	BERN	3 S	1234.5	1235.6	10.0	32.0			
	9400	HUAN	4 S/F	1234.6	1235.2	2.4	36.8	19.2		0
	10715	DWIN	1 S	1235.0	1236	2.0	39	15		
	19600	BERN	3 S	1235.0	1235.3	4.0	31.0			
	15000	KISV	1 S	1235.0	1235.3	2.0	12			
	536	ONDR	2 S/F	1302.0	1303.7	5.5	17.0	5.0		
	930	BORD	46 C	1302.2	1303.5	3.0	54	4		
	808	ONDR	2 S/F	1302.4	1303.7	4.5	61.0	8.0		
	9400	HUAN	1 S	1357.6	1358.2	1.6	11.7	7.5		0
	9400	HUAN	29 PBI	1359.4	1359.4	17.9	6.7	5.8		0
	930	BORD	41 F	1404.7	1404.9	.3	11	2		
	930	BORD	41 F	1408.8	1408.9	2.0	21	2		
	2800	OTTA	27A RF	1417.0		383.0D	9.8			
	2800	OTTA	24 R	1417.0	1417	17.0E	9.8			
	2800	OTTA	24P R	1417.0		338.0	9.8			
	2800	OTTA	20 GRF	1440.0	1455	90.0	14.2	6.0		
	3200	BERN	20 GRF	1442.0	1452.8	80.0	12.0			
	5200	BERN	20 GRF	1442.0	1452.9	80.0	16.0			
	930	BORD	41 F	1557.6	1557.6	1.0	137	2		
	2800	OTTA	21 GRF	1650.0	1840	184.0	30.0	15.0		
	9400	HUAN	21 GRF	1656.4	1843.6	186.2	55.2	23.1		R
	11800	BERN	45 C	1707.2	1709.3	23.0D	90.0U			
	3200	BERN	45 C	1707.6	1726.3	23.0D	94.0U			
	19600	BERN	45 C	1708.5	1709.3	23.0D	84.0U			
	9400	HUAN		1708.5	1711.4		82.0			
	9400	HUAN	45 C	1708.5	1709.3	4.3	110.5	45.2		R
	930	BORD	46 C	1708.6	1709	7.0	166	10		
	5200	BERN	45 C	1708.8	1726.3	23.0D	136.0U			
	2800	OTTA	46F C	1708.8	1709.5	40.0	112.0	22.0		
	9400	HUAN	4 S/F	1723.7	1726.1	5.5	117.2	31.5		0
	2800	OTTA	1 S	1822.5	1823.4	1.5	8.8	4.0		
	2800	OTTA	46F C	1825.5	1849.8	45.0	325.0	99.0		
	9400	HUAN	3 S	1830.2	1832.5	11.0	95.4	46.0		R
	9400	HUAN	4 S/F	1844.2	1849.8	20.6	77.0	26.8		R
	2800	OTTA	1 S	1913.8	1915	5.0	3.4	1.7		
	2800	OTTA	26 FAL	1955.6	2040	45.0	-9.8	-6.6		
	9400	TYKW	21 GRF	2140.0U	2220	170.0U	32	8 U		RAIN
	2000	TYKW	21 GRF	2140.0	2220	170.0	8	4		
	3750	TYKW	21 GRF	2140.0	2220	170.0	16	7		
	2695	PENT	21 GRF	2145.0	2300	160.0	11.2	5.6		
	2800	OTTA	40 F	2209.0	2219	14.0	5.6			
	9400	TYKW	5 S	2215.0	2216.2	4.0	15	4		
	1000	TYKW	45 C	2215.5	2215.8	1.0	5	1		
	2000	TYKW	5 S	2255.0	2300	40.0	4	2		
	3750	TYKW	20 GRF	2255.0	2302	40.0	7	3		
	2695	PENT	1 S	2257.0	2258	2.5	6.4	3.2		
	3750	TYKW	5 S	2341.0	2346	15.0	4	2		
10	200	GORK	43 NS	0430.0		470.0D		20.0		
	127	TORN	44 NS	0600.0E	0823.3	490.0D	2500	11		V1
	204	IZMI	43 NS	0600.0		360.0D	80			
	100	GORK	43 NS	0623.0		357.0D		35.0		
	260	ONDR	44 NS	0635.0E		455.0D	84.0	11.0		
	430	KRAK	44 NS	0700.0E	0727.3	118.0D	600.0	65.0		
	430	KRAK	44 NS	0858.0E	1009.2	117.0D	500.0	8.0		
	245	SGMR	43 NS	1015.0	1221.5	780.0D	340			
	1415	ATHN	43 NS	1645.0	1647.3	10.5D	170			
	200	HIRA	44 NS	2008.0E	2153	480.0D	15	5		0
	100	HIRA	44 NS	2008.0E	2058.3	120.0D	50	25		MR
	208	VORO	44 NS	2200.0E		360.0D		11		
	3750	TYKW	5 S	0006.0	0010	15.0	3	1.5		
	2000	TYKW	31 ABS	0030.0	0100	60.0	-2	-1		
	2695	PENT	26 FAL	0030.6	0100	30.0	-7.4	-3.7		
	9400	TYKW	31 ABS	0031.0	0104	60.0	-12	-6		
	3750	TYKW	31 ABS	0031.0	0100	60.0	-7	-4		
	9400	TYKW	5 S	0110.0	0116	15.0	4	2		
	2000	TYKW	5 S	0111.5	0112.0	3.5	4	1		
	3750	TYKW	45 C	0111.7	0112.1	16.0	14	2.5		
	2695	PENT	8 S	0111.9	0111.9	.1	27.6			
	3750	TYKW	20 GRF	0133.0	0208	60.0	10	4		
	9400	TYKW	20 GRF	0133.0	0205	60.0	7	3		
	2000	TYKW	20 GRF	0135.0	0200	45.0	2	1		
	3750	TYKW	21 GRF	0236.0	0246	40.0	6	2.5		

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10	2000	TYKW	20 GRF	0238.0	0246	40.0	3	1.5		
	3750	TYKW	5 S	0239.0	0240.3	3.0	2	.7		
	9400	TYKW	20 GRF	0244.0	0249	35.0	7	3		RAIN
	17000	NOBE	20 GRF	0302.5	0321.3	210.0	27			0
	9400	TYKW	28 PRE	0325.0	0346.4	45.0	9	3		
	3750	TYKW	28 PRE	0329.0	0400	41.0	6	2.5		
	2000	TYKW	28 PRE	0330.0	0351	40.0	5	2		
	2840	PEKG	7 C	0345.0	0417.5	39.0	24.0	10.0		
	9400	TYKW	45 C	0410.0	0430	50.0	35	28		
	2000	TYKW	45 C	0410.0	0417.7	30.0	36	13		
	3750	TYKW	45 C	0410.0	0417.3	55.0	28	16		
	17000	NOBE	24 R	0412.0	0428.4	230.0	25			0
	3659	YUNN	20 GRF	0412.0	0415	48.0				RIF 8.
	9375	YUNN	20 GRF	0413.0	0428	46.0				RIF 7.
	1000	TYKW	45 C	0416.0	0417.6	30.0	4	1		
	9100	GORK	21 GRF	0420.0E		487.0D				
	2950	GORK	21 GRF	0420.0E	0421.0	480.0D	32.0			
	2950	GORK	1 S	0421.5	0421.7	2.4	10.0	5.0		
	2840	PEKG	29 PBI	0424.0		8.0D	13.0			
	2000	TYKW	30 PBI	0440.0		210.0D	10	8 D		
	1000	TYKW	45 C	0448.5	0448.8	1.1	10	1.5		
	1000	TYKW	5 S	0455.5	0456.0	1.5	1.5	.5		
	2000	TYKW	5 S	0455.5	0456.0	1.5	1.5	.5		
	9400	TYKW	30 PBI	0500.6		190.0D	23	20 D		
	3750	TYKW	30 PBI	0505.0		185.0D	13	10 D		
	9400	TYKW	21 GRF	0505.0	0550	100.0	10	4		
	3750	TYKW	21 GRF	0510.0	0550	105.0	9	5		
	3750	TYKW	5 S	0515.0	0517	7.0	6	2		
	9400	TYKW	5 S	0515.0	0518	7.0	3	1.5		
	2000	TYKW	5 S	0516.0	0517.3	4.0	2	.7		
	2000	TYKW	20 GRF	0527.0	0600	85.0	6	3		
	650	GORK	23 GRF	0551.0	0733.8	389.0D	35.0			
	950	GORK	21 GRF	0601.8	0743.0	182.0	16.0			
	3750	TYKW	5 S	0656.0	0657.2	3.0	9	2		
	930	BORD	46 C	0656.7	0657.2	2.0	67	3		
	2000	TYKW	5 S	0656.8	0657.4	3.0	12	3.5		
	200	GORK	8 S	0656.9	0657.2	1.6	60.0D			
	100	GORK	8 S	0657.0	0657.4	1.0	400.0D			
	2950	GORK	1 S	0657.0	0657.2	1.0	11.0	5.0		
	950	GORK	4 S/F	0657.0	0657.2	1.9	46.0			
	1000	TYKW	45 C	0657.0	0657.2	3.0	26	6		
	3100	CRIM	1 S	0657.0	0657.5	1.0	9	3		
	33	UPIC	4 S/F	0657.2	0657.4	.8				
	29	UPIC	8 S	0657.5	0657.7	.7				
	3750	TYKW	5 S	0703.0	0704.8	15.0	8	2.5		
	2000	TYKW	5 S	0703.0	0705	6.0	7	3		
	1000	TYKW	45 C	0703.5	0704.9	2.5	7	2		
	950	GORK	2 S/F	0703.7	0704.1	2.0	12.0			
	3100	CRIM	20 GRF	0704.0	0705.0	11.0	6	2		
	2000	TYKW	29 PBI	0709.0		20.0	1.5	.7		
	3750	TYKW	45 C	0749.6	0750.0	10.0	8	1.5		
	3100	CRIM	1 S	0749.0	0750.0	2.0	6	2		
	810	KRAK	8 S	0844.0	0844.0	.1	48.0			
	650	GORK	4 S/F	0856.5	0857.3	1.8	25.0	8.0		
	3100	CRIM	26 FAL	0919.0	1018.0		14			
	810	KRAK	8 S	1009.3	1009.5	.5	14.0			
	3100	CRIM	28 PBI	1033.5	1103.4	30.0	14	5		
	950	GORK	23 GRF	1036.0		111.0D				
	3200	BERN	46 C	1050.3	1114.6	120.0	380.0			
	8400	BERN	47 GB	1050.3	1114.8	120.0	1321.0			
	11800	BERN	47 C	1050.3	1114.8	120.0	1382.0			
	5200	BERN	47 GB	1050.3	1114.8	120.0	782.0			
	19600	BERN	47 C	1050.3	1114.8	120.0	942.0			
	35000	BERN	46 C	1050.3	1115.7	120.0	427.0			
	430	KRAK		1055.5	1114.5		700.0D			
	430	KRAK		1055.5	1128 U		700.0D			
	430	KRAK	49 GB	1055.5	1107.3	49.0	440.0	200.0		
	15000	KISV		1100.0	1108.3		185			
	6100	KISV		1100.0	1108.3		168			
	6100	KISV	47 GB	1100.0	1115	25.0	620			
	6100	KISV		1100.0	1107.5		140			
	15000	KISV		1100.0	1115.7		590			
	15000	KISV	47 GB	1100.0	1115	25.0	890			
	15000	KISV		1100.0	1107.6		160			
	10715	DWIN	49 GB	1101.0	1115	85.0	1050 D			
	2650	DWIN	49 GB	1101.0	1115	75.0	410	120		
	9100	GORK	46 C	1102.0	1108.1	18.7	240.0			
	9100	GORK		1102.6	1114.7		1500.0			
	810	KRAK		1102.5	1115.5		160.0			
	810	KRAK	48 C	1102.5	1108.3	37.0	90.0	67.0		
	810	KRAK		1102.5	1126.0		270.0			
	810	KRAK		1102.5	1131.0		130.0			
	808	ONDR	49 GB	1102.5		38.0	70.0D	51.0		
	536	ONDR	49 GB	1102.5			43.0D	25.0		
	3000	IZMI	23 GRF	1102.5	1114.9	37.5	480	180		

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10	930	BORD	45 C	1103.0	1115.6	77.0	216	50		
	950	GORK		1103.0	1134.0		149.0			
	950	GORK	46 C	1103.0	1108.6	36.0	136.0			
	950	GORK		1103.0	1126.6		240.0			
	950	GORK		1103.0	1115.5		290.0			
	3100	CRIM	3 S	1103.4	1108.5	9.0	87	27		
	2950	GORK		1103.5	1127.8		126.0			
	2950	GORK	46 C	1103.5	1108.0	33.0	60.0			
	2950	GORK		1103.5	1114.6		430.0			
	260	ONDR	49 GB	1105.0		31.0	185.0D	84.0		
	228	HARS	47 GB	1105.0	1116.7	68.0	570	50		
	650	GORK		1105.1	1114.7		140.0			
	650	GORK		1105.1	1154.1		66.0			
	650	GORK	46 C	1105.1	1109.2	66.9	170.0			
	650	GORK		1105.1	1127.7		260.0			
	650	GORK		1105.1	1119.9		80.0			
	33	UPIC	49 GB	1105.9	1123	26.0				
	200	GORK		1106.0E	1117.8		770.0			
	200	GORK	46 C	1106.0E	1110.4	30.0D	2000.0			
	200	GORK		1106.0E	1121.0		820.0			
	200	GORK		1106.0E	1128.5		720.0			
	127	TORN	27 RF	1106.0	1107.8	70.0	3100	40		
	29	UPIC	49 GB	1106.1	1118.4	25.9				
	100	GORK	46 C	1108.0	1112.0	8.2D	7000.0			
	100	GORK		1108.0	1118.0		7000.0			
	204	IZMI	48 C	1110.0	1110.5	25.0	700	300		
	127	TORN	49 GB	1111.1		23.0		1700 D		SATURATED
	3100	CRIM	47 GB	1112.0	1114.8	17.0	677	225		
	3100	CRIM	30 PBI	1112.0	1119.0	116.0D	117			
	2800	OTTA		1120.0	1128	60.0D	192.0			
	15000	KISV	29 PBI	1125.0		100.0	115			
	6100	KISV	29 PBI	1125.0		80.0	110			
	3100	CRIM	3 S	1131.0	1132.5	4.0	36	12		
	33	UPIC	41 F	1131.9	1207.6	110.1				
	29	UPIC	41 F	1132.0	1153.9	95.1				
	200	GORK	46 C	1143.8	1150.3	25.5	270.0			
	200	GORK		1143.8	1156.8		240.0			
	430	KRAK		1146.5	1153.7		240.0			
	430	KRAK	45 C	1146.5	1150.0	26.0	230.0	68.0		
	810	KRAK	45 C	1147.0	1149.0	27.5	63.0	24.0		
	810	KRAK		1147.0	1154.0		67.0			
	808	ONDR	46 C	1147.0		32.0	70.0D	46.0		
	260	ONDR	46 C	1147.0	1150.3	26.0	101.0	46.0		
	950	GORK	46 C	1147.3	1149.5	16.6	69.0			
	950	GORK		1147.3	1154.0		72.0			
	536	ONDR	46 C	1147.5		25.0	43.0D	18.0		
	204	IZMI	45 C	1147.5	1150.0	25.0	130	80		
	3100	CRIM	20 GRF	1147.5	1156.8	25.0	55	18		
	2950	GORK	20 GRF	1151.8	1157.0	15.0	14.0	7.0		
	9100	GORK	1 S	1153.3	1154.0	1.8	9.0	4.0		
	2800	OTTA	29 PBI	1220.0	1220	215.0	26.4	11.0		
	810	KRAK		1227.0	1243.0		3500.0D			
	810	KRAK		1227.0	1248 U		900.0D			
	810	KRAK	49 GB	1227.6	1235.5	40.0	440.0	150.0		
	930	BORD	41 F	1326.3	1326.5	.6	67	2		
	930	BORD	41 F	1409.4	1409.8	.7	51	3		
	930	BORD	8 S	1501.2	1501.2	.2	14	1		
	930	BORD	42 SER	1556.5	1601.4	6.5	25	2		
	930	BORD	41 F	1614.0	1614.4	.7	175	4		
	2800	OTTA	21 GRF	1625.0	1707	365.0	40.0	17.8		
	3200	BERN	47 GB	1630.0	1647.7	50.0D	852.0			
	2650	DWIN	49 GB	1630.0		20.0D	430 D			
	5200	BERN	47 GB	1630.0	1646.6	50.0D	1700.0			
	11800	BERN	47 GB	1632.0	1648.0	50.0D	1626.0			
	8400	BERN	47 GB	1632.0	1647.6	50.0D	1682.0			
	2800	OTTA	3 S	1634.5	1736	5.0	30.0	12.6		
	19600	BERN	47 GB	1639.0	1648.0	50.0U	1265.0			
	35000	BERN	47 GB	1639.0	1647.6	50.0U	577.0			
	33	UPIC	48 C	1639.6	1700.3	25.5U				
	930	BORD		1640.0	1710		1534			
	930	BORD	47 GB	1640.0	1647.7	36.0	1782	270		
	2800	OTTA	47 GB	1640.5	1651.5	25.0	1035.0	390.0		
	2695	ATHN	47 GB	1641.0	1647.3	14.5D	1300			
	9400	HUAN	47 GB	1641.0	1648.8U	18.5	1654.6	709.7		R
	4995	ATHN	47 GB	1641.0	1647.3	14.5D	1700			
	228	HARS	45 C	1642.9	1646.5	12.5	875	90		
	10715	DWIN	49 GB	1643.0		8.0D	1050 D			
	8800	ATHN	47 GB	1643.0	1647.3	12.5D	2700			
	29	UPIC	48 C	1645.2	1700.3	19.4				
	9400	HUAN	30 PBI	1659.5	1659.5	110.5	259.6	64.5		R
	2800	OTTA	4 S/F	1708.6	1712.5	14.0	69.0	25.2		
	930	BORD	29 PBI	1716.0	1729	43.0	138	35		
	9400	HUAN	4 S/F	1720.0	1720.7	2.2	68.1	27.5		0
	2695	PENT	4 S/F	1725.0	1730.5	10.0	24.6	8.2		
	2800	OTTA	3 S	1738.5	1740.2	7.0	38.0	13.0		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
10	2800	OTTA	1 S	1749.5	1751	4.0	7.6	3.8		
	9400	HUAN	45 C	1824.8	1825.3	2.0	155.5	97.0		Ø
	9400	HUAN		1824.6	1825.6		153.8			
	15400	SGMR	4 S/F	1825.1	1825.3	2.9	139			
	2800	OTTA	21 GRF	1900.0	1925	60.0	10.0	6.6		
	2695	PALE	8 S	1907.3	1908.0	.2	23			
	2800	OTTA	2 S/F	1907.3	1909.9	6.0	8.6	4.0		
	4995	PALE	4 S/F	1907.6	1907.8	3.5	24			
	9400	HUAN	22 GRF	1909.2	1932.6	112.7	36.7	12.2		Ø
	2800	OTTA	3 S	1918.0	1920.3	6.0	20.0	6.6		
	9400	TYKW	5 S	2207.5	2208.2	2.5	19	7		
	2800	OTTA	1 S	2207.8	2208.1	3.0	9.0	3.0		
	3750	TYKW	5 S	2208.0	2208.3	2.0	20	6		
	9400	TYKW	30 PBI	2210.0		30.0	6	2		
	3750	TYKW	30 PBI	2210.0		5.0	2	1		
	3750	TYKW	31 ABS	2215.0	2255	110.0	-6	-3		
	2000	TYKW	32 ABS	2220.0	2255	100.0	-4	-2		
	9400	TYKW	31 ABS	2240.0	2310	90.0	-6	-3		
	245	PALE	8 S	2333.8	2334.6	1.2	98			
	3750	TYKW	5 S	2349.0	2349.5	1.0	8	3		
	9400	TYKW	5 S	2349.0	2349.5	1.0	17	6		
	2000	TYKW	5 S	2349.0	2349.5	1.0	2	.7		
	15400	LEAR	8 S	2349.1	2349.5	.5	13			
	4995	LEAR	8 S	2349.1	2349.3	.2	19			
	8800	LEAR	8 S	2349.1	2349.3	.5	31			
	2695	LEAR	8 S	2349.1	2349.5	.7	88			
11	245	PALE	43 NS	0001.0E	0013.3	272.0D	250			
	200	GORK	44 NS	0348.0E		423.0D		5.0		
	245	LEAR	43 NS	0523.5	0528.8	25.3	55			
	260	ONDR	44 NS	0643.0E		457.0D	40.0	5.0		
	245	LEAR	43 NS	0648.0	0754.6	190.0D	89			
	204	IZMI	43 NS	0800.0		240.0D	90			
	127	TORN	43 NS	0825.0	0903.5	500.0D	100	1		V1
	245	SGMR	43 NS	1013.0	1503.1	527.0D	65			
	200	HIRA	44 NS	2007.0E	2333	780.0D	60	10		WL
	208	VORO	44 NS	2200.0E		120.0D		15		
	245	LEAR	43 NS	2310.0	0115.0	647.0D	95			
	100	HIRA	43 NS	2335.0		580.0D		50	U	
	245	LEAR	43 NS	2343.0	0013.5	122.1	119			
	3750	TYKW	5 S	0025.0	0032	20.0	3.5	1.5		
	9400	TYKW	5 S	0030.0	0033	15.0	6	3		
	3750	TYKW	28 PRE	0055.0	0105	21.5	3	1.5		
	2000	TYKW	5 S	0056.0	0056.3	1.0	2	.7		
	2840	PEKG	3 S	0107.0	0118	14.0	41.0	10.0		
	2930	VORO	3 S	0115.0	0118	10.0	47			
	9375	YUNN	2 S/F	0116.0	0118	7.0				RIF 24.6
	3659	YUNN	3 S	0116.0	0118					RIF 15.9
	3750	TYKW	5 S	0116.5	0118.1	5.5	52	17		
	2000	TYKW	5 S	0116.5	0118.2	3.5	8	3		
	9400	TYKW	45 C	0116.5	0118.1	3.5	115	30		
	8800	LEAR	4 S/F	0116.5	0118.1	2.6	139			
	5730	IRKU	2 S	0116.6	0118.2	4.0	80	20		L
	4995	LEAR	4 S/F	0116.6	0118.1	2.5	71			
	2695	PENT	3 S	0116.7	0118.1	4.0	21.2	8.8		
	2695	LEAR	4 S/F	0116.8	0118.1	2.3	27			
	9395	PEKG	45 C	0116.8	0118	3.1	109.0	38.0		
	15400	LEAR	4 S/F	0116.8	0118.1	2.3	80			
	17000	NOBE	1 S	0116.9	0118.1	1.8	73			R
	15400	PALE	8 S	0117.0	0118.0	1.6	82			
	4995	PALE	8 S	0117.3	0118.1	1.3	46			
	8800	PALE	8 S	0117.5	0118.0	.8	84			
	2695	PALE	8 S	0118.0	0118.1	.6	23			
	17000	NOBE	29 PBI	0118.7	0118.7	19.0	12			Ø
	9400	TYKW	30 PBI	0120.0		15.0	10	4		
	2000	TYKW	30 PBI	0120.0		10.0	2	1		
	9395	PEKG	29 PBI	0120.0		11.0	18.0	10.0		
	3750	TYKW	30 PBI	0122.0		17.0	7	3.5		
	2000	TYKW	31 ABS	0130.0	0200	88.0	-4	-2		
	9400	TYKW	31 ABS	0135.0	0210	83.0	-7	-3		
	3750	TYKW	31 ABS	0139.0	0210	79.0	-5	-3		
	2000	TYKW	8 S	0253.3	0253.4	.3	8	1.5		
	2000	TYKW	5 S	0258.0	0258.9	6.0	3	1		
	9400	TYKW	45 C	0258.0	0258.9	12.0	6	1.5		
	3750	TYKW	45 C	0258.0	0258.9	15.0	4	1.5		
	245	LEAR	4 S/F	0304.1	0305.5	6.7	24			
	606	LEAR	4 S/F	0307.0	0307.1	6.8	35			
	410	LEAR	4 S/F	0307.0	0309.5	6.8	26			
	1000	TYKW	42 SER	0309.7	0310.0	1.0	9	1.5		
	2000	TYKW	21 GRF	0320.0	0530	220.0	5	2		
	9400	TYKW	21 GRF	0325.0	0455	215.0	10	5		
	9400	TYKW	5 S	0326.0	0331	10.0	4	2		
	3750	TYKW	21 GRF	0335.0	0410	210.0	7	3		
	9400	TYKW	5 S	0337.6	0338	3.0	4	1.5		
	3750	TYKW	5 S	0341.5	0342.1	2.5	2.5	1		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
11	9400	TYKW	5	S	0341.5	0342.0	1.5	4	1.5		
	3750	TYKW	5	S	0353.5	0353.8	1.5	1.5	.5		
	9400	TYKW	5	S	0402.0	0412	20.0	7	3		
	3750	TYKW	5	S	0402.7	0403.6	4.0	4.5	1.5		
	2950	GORK	20	GRF	0412.5E	0540.0	150.0D	13.0			
	9100	GORK	21	GRF	0415.6E		406.0D				
	3750	TYKW	5	S	0417.0	0417.8	6.0	4	1.5		
	3750	TYKW	28	PRE	0442.0	0445	3.0	2	1		
	2840	PEKG	3	S	0442.0	0446	10.0	13.0	5.0		
	9100	GORK	1	S	0444.8	0445.6	2.0	13.0	6.0		
	3750	TYKW	45	C	0445.0	0445.7	2.0	17	7		
	9400	TYKW	5	S	0445.0	0445.6	4.0	15	3		
	2000	TYKW	45	C	0445.0	0445.6	3.0	8	2		
	1000	TYKW	8	S	0445.5	0445.6	.2	4.5	1.5		
	1415	LEAR	8	S	0445.5	0445.6	.1	21			
	4995	LEAR	8	S	0445.5	0445.6	.1	16			
	8800	LEAR	8	S	0445.5	0445.6	.3	21			
	2695	LEAR	8	S	0445.5	0445.6	.3	19			
	3750	TYKW	30	PBI	0447.0		40.0	6	2		
	3750	TYKW	45	C	0456.0	0459.8	25.0	7	2		
	17000	NOBE	20	GRF	0457.3	0506.4	25.0	12			0
	15400	LEAR	4	S/F	0457.3	0404.5	18.5	11			
	4995	LEAR	4	S/F	0457.3	0500.3	5.5	08			
	2695	LEAR	4	S/F	0457.3	0458.0	4.5	06			
	8800	LEAR	4	S/F	0457.3	0507.0	16.8	10			
	9400	TYKW	45	C	0457.5	0507	35.0	7	4		
	1415	LEAR	4	S/F	0514.5	0518.0	10.8	01			
	2695	LEAR	4	S/F	0534.1	0536.8	12.0	08			
	9400	TYKW	5	S	0535.0	0539	10.0	7	3		
	3750	TYKW	45	C	0535.0	0539.5	10.0	3	1		
	2000	TYKW	45	C	0535.0	0541	20.0	6	2		
	9100	GORK	1	S	0536.9	0539.0	5.0	6.6	3.0		
	1415	LEAR	8	S	0537.6	0537.1	.1	18			
	3100	CRIM	26	FAL	0607.0	0653.0	46.0	15			
	245	LEAR	8	S	0612.5	0612.6	.6	22			
	5200	BERN	41	F	0824.5	0829.1	25.0	17.0			
	3200	BERN	41	F	0824.7	0829.7	25.0	8.0			
	2950	GORK	1	S	0825.4	0825.7	1.0	5.0	2.5		
	3100	CRIM	1	S	0825.5	0826.0	1.0	5	1		
	3100	CRIM	1	S	0828.5	0829.5	2.0	5	2		
	4995	LEAR	8	S	0828.8	0829.1	1.8	18			
	2950	GORK	20	GRF	0828.8	0829.1	150.0E	8.0			
	6100	KISV	3	S	0828.8	0829.3	3.0	9			
	2695	LEAR	8	S	0828.8	0829.1	1.3	10			
	8800	LEAR	8	S	0828.8	0829.1	1.3	10			
	5200	BERN	3	S	1014.0	1017.5	25.0	14.0			
	8400	BERN	3	S	1014.3	1017.5	25.0	32.0			
	11800	BERN	3	S	1014.5	1017.8	25.0	18.0			
	10715	DWIN	1	S	1017.0	1017.5	1.0	20	10		
	9100	GORK	2	S/F	1017.0	1017.5	3.2	32.0			
	6100	KISV	45	C	1017.2	1017.6	1.5	22			
	2800	OTTA	1	S	1234.0	1236	8.0	4.0	1.8		
	9400	HUAN	2	S/F	1301.8	1302.6	1.8	19.6	8.6		0
	11800	BERN	8	S	1302.2	1303.2	1.5	29.0			
	8400	BERN	8	S	1302.2	1303.2	1.5	20.0			
	4995	SGMR	4	S/F	1332.8	1333.8	3.2D	54			
	5200	BERN	3	S	1333.0	1334.8	24.0	49.0			
	2800	OTTA	4	S/F	1333.0	1335	4.0	40.0	14.0		
	3200	BERN	3	S	1333.3	1334.9	24.0	31.0			
	2695	SGMR	4	S/F	1333.5	1334.8	4.5	41			
	2695	ATHN	4	S/F	1333.6	1334.8	4.2	36			
	4995	ATHN	4	S/F	1333.6	1334.8	3.2D	52			
	8800	ATHN	4	S/F	1333.8	1335.1	3.0	23			
	8400	BERN	3	S	1334.0	1334.8	15.0	36.0			
	8800	SGMR	4	S/F	1334.0	1335.3	4.0D	33			
	11800	BERN	3	S	1334.0	1335.2	15.0	26.0			
	10715	DWIN	1	S/F	1334.0	1335	2.0	20	10		
	9400	HUAN	2	S/F	1334.0	1335.4	2.3	26.7	16.3		0
	2650	DWIN	2	S/F	1334.0	1335	3.0	40	15		
	15400	SGMR	4	S/F	1334.5	1335.3	3.5D	17			
	9400	HUAN	29	PBI	1336.3	1336.3	12.9	8.9	7.8		0
	2800	OTTA	22	GRF	1420.0	1520	150.0	4.0	2.0		
	8400	BERN	3	S	1516.0	1516.6	3.0	53.0			
	10715	DWIN	2	S/F	1516.0	1516	2.0	60	20		
	11800	BERN	3	S	1516.0	1516.6	3.0	51.0			
	19600	BERN	3	S	1516.0	1516.5	3.0	46.0			
	4995	SGMR	4	S/F	1516.1	1516.3	2.4	21			
	8800	SGMR	4	S/F	1516.1	1516.6	2.7D	60			
	3200	BERN	3	S	1516.3	1516.6	3.0	7.0			
	5200	BERN	3	S	1516.3	1516.6	3.0	16.0			
	15400	SGMR	4	S/F	1517.1	1516.3	2.4D	38			
	2800	OTTA	21	GRF	1730.0	1815	130.0	9.4	4.7		
	9400	HUAN	21	GRF	1735.0	1832.2	85.8	15.6	9.1		0
	15400	SGMR	4	S/F	1827.1	1828.1	4.7D	58			
	9400	HUAN			1827.4	1828.8		40.4			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
11	9400	HUAN	45	C	1827.4	1828.2	3.3	51.4	24.1		Ø
	8800	SGMR	8	S	1827.5	1828.1	1.6D	47			
	8800	PALE	8	S	1827.6	1828.1	1.4	60			
	15400	PALE	4	S/F	1827.6	1828.1	2.9	52			
	4995	PALE	8	S	1827.6	1828.1	1.2	43			
	2800	OTTA	8	S	1827.8	1827.9	.7	9.Ø			
	4995	SGMR	8	S	1828.5	1829.1	2.Ø	47			
	245	PALE	8	S	1837.5	1837.6	.3	39			
	245	PALE	8	S	1928.1	1929.1	1.2	76			
	2800	OTTA	1	S	2000.0	2001	2.Ø	3.Ø	1.5		
	9400	HUAN	4	S/F	2002.0	2003.Ø	2.2	152.5	34.2		R
	2800	OTTA	23	GRF	2030.0	2114	120.ØD	9.Ø			
	1000	TYKW	5	S	2120.0	2120.3	1.Ø	12	4		
	3750	TYKW	5	S	2139.5	2140.2	1.5	9	3.5		
	2000	TYKW	5	S	2139.5	2140.3	3.Ø	8	2.5		
	2800	OTTA	1	S	2139.5	2140	2.Ø	6.6	3.3		
	9400	TYKW	5	S	2139.8	2140.2	1.5	10	4		
	1000	TYKW	5	S	2140.0	2140.3	.6	28	7		
	1000	TYKW	45	C	2140.7	2141.6	2.ØU	26 U	9 U		
	3750	TYKW	5	S	2154.0	2205	25.0	3	1.5		
	9400	TYKW	5	S	2156.5	2156.7	1.Ø	7	2		
	9400	TYKW	5	S	2158.0	2205	23.0	4	2		
	3750	TYKW	28	PRE	2234.0	2303.6	63.0	10	4		
	9400	TYKW	28	PRE	2244.0	2300.3	53.0	12	3		
	1000	TYKW			2300.0	2339.7		7			
	2000	TYKW	28	PRE	2300.0	2305	37.0	4	2.5		
	1000	TYKW	45	C	2300.0	0036.0	270.0	90	6		
	1000	TYKW			2300.0	2302.1		8			
	3750	TYKW	45	C	2337.0	2339.5	48.0	53	25		
	2000	TYKW	45	C	2337.0	2339.6	53.0	21	11		
	9400	TYKW	45	C	2337.0	2339.2	43.0	78	28		
	4995	LEAR	47	GB	2337.3	2339.5	9.7	72			
	8800	LEAR	47	GB	2337.3	2339.1	9.7	85			
	2695	LEAR	4	S/F	2337.3	2339.6	3.3	35			
	4995	PALE	4	S/F	2338.1	2339.5	4.0	65			
	1415	LEAR	47	GB	2338.3	2339.1	.8	27			
	8800	PALE	8	S	2338.6	2339.1	1.7	87			
	2695	PALE	8	S	2339.1	2339.6	1.Ø	32			
	15400	LEAR	8	S	2339.1	2339.6	.7	24			
	15400	PALE	8	S	2339.5	2339.6	.1	25			
	35000	NAGO	20	GRF	2344.0	2407	54.0	23			
	200	HIRA	27	RF	2344.6	0041.8	205.0	260	70		ML
	245	LEAR	8	S	2345.1	2345.1	.2	61			
	100	HIRA	27	RF	2347.0	0043	190.0	2400	450		ML
	500	HIRA	27	RF	2348.9	0029	100.0	30	20		SL
12	200	GORK	44	NS	Ø344.ØE		432.ØD		5.Ø		
	100	GORK	44	NS	Ø345.ØE		425.ØD		25.Ø		
	33	UPIC	43	NS	Ø540.5	0632.5	605.3D				
	29	UPIC	43	NS	Ø540.9	0632.9	665.3D				
	260	ONDR	44	NS	Ø630.ØE		468.ØD	162.Ø	11.Ø		
	127	TORN	43	NS	Ø650.Ø	Ø924.Ø	460.ØD	150	7		V1
	245	SGMR	43	NS	1012.Ø	1308.8	588.ØD	250			
	410	SGMR	43	NS	1012.Ø	1120.5	588.ØD	11			
	200	HIRA	44	NS	2007.ØE		780.ØD	35			ML
	100	HIRA	44	NS	2007.ØE		770.ØD	210 U			
	245	LEAR	43	NS	2252.ØE	Ø020.1	114.3D	370			
	410	LEAR	43	NS	2252.ØE	Ø019.5	119.1D	31			
	9400	TYKW	30	PBI	Ø020.Ø		140.Ø	23	12		
	3750	TYKW	30	PBI	Ø025.Ø		130.Ø	25	12		
	2000	TYKW	30	PBI	Ø030.Ø		115.Ø	11	5		
	2000	TYKW	45	C	Ø040.7	Ø043.3	6.Ø	8	2.5		
	3750	TYKW	5	S	Ø041.6	Ø043.2	6.Ø	6	2		
	35000	NAGO	20	GRF	Ø051.Ø	Ø138	260.Ø	52			
	2000	TYKW	5	S	Ø053.Ø	Ø054.4	3.Ø	2.5	1		
	9400	TYKW	5	S	Ø059.5	Ø059.8	1.5	11	3		
	2000	TYKW	45	C	Ø112.Ø	Ø113.5	3.Ø	3	1		
	2840	PEKG	3	S	Ø112.Ø	Ø123	22.Ø	7.1	4.Ø		
	2963	YUNN	20	GRF	Ø120.Ø	Ø123	14.Ø				RIF 5.
	2000	TYKW	5	S	Ø122.Ø	Ø123.3	2.Ø	6	2		
	3750	TYKW	5	S	Ø122.Ø	Ø123.3	2.Ø	11	4		
	2000	TYKW	30	PBI	Ø124.Ø		8.Ø	2	1		
	3750	TYKW	30	PBI	Ø124.Ø		10.Ø	4	2		
	3750	TYKW	5	S	Ø128.Ø	Ø128.1	1.Ø	5	1.5		
	2000	TYKW	5	S	Ø128.Ø	Ø128.2	.6	2	.5		
	9400	TYKW	5	S	Ø128.Ø	Ø128.1	.6	11	4		
	9400	TYKW	5	S	Ø134.Ø	Ø135.Ø	6.Ø	10	3.5		
	17000	NOBE	1	S	Ø134.5	Ø134.7	3.Ø	20			Ø
	9400	TYKW	45	C	Ø143.Ø	Ø144.9	4.Ø	5	1.5		
	3659	YUNN	20	GRF	Ø153.Ø	Ø157	9.Ø				RIF 7.
	2840	PEKG	41	F	Ø153.6	Ø157	6.4	10.Ø	4.Ø		
	3750	TYKW	28	PRE	Ø154.Ø	Ø155.9	4.3	10	2		
	9400	TYKW	5	S	Ø155.5	Ø156.Ø	1.5	15	4		
	2000	TYKW	28	PRE	Ø155.5	Ø156.Ø	2.9	2	.7		
	9400	TYKW	5	S	Ø158.3	Ø158.9	3.5	8	3		

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12	3750	TYKW	5	S	0158.3	0158.8	11.0	15	3.5		
	2000	TYKW	5	S	0158.4	0159.0	10.0	8	1.5		
	9400	TYKW	5	S	0206.0	0207.3	4.0	6	3		
	2000	TYKW	31	ABS	0225.0	0330	330.0	-8	-4		
	3750	TYKW	31	ABS	0251.0	0335	304.0	-10	-6		
	3750	TYKW			0251.0	0510		-10			
	9375	YUNN	1	S	0253.0	0254	2.0				RIF 3.
	2963	YUNN	41	F	0253.0	0257	11.0				RIF 5.
	3659	YUNN	1	S	0300.0	0300.5	1.0				RIF 6.
	2963	YUNN	2	S/F	0301.0	0301.5	1.0				RIF 3.
	2000	TYKW	5	S	0302.0	0302.4	2.0	2	.7		
	2840	PEKG	1	S	0302.6	0302.6	2.0	6.0	3.0		
	9400	TYKW	45	C	0302.3	0314.7	14.7	19	5		
	3750	TYKW	5	S	0303.0E	0303.1	1.5D	5	1.5D		
	17000	NOBE	21	GRF	0304.4	0315.3	17.0	12			0
	17000	NOBE	1	S	0314.5	0314.7	.5	28			0
	3750	TYKW	45	C	0314.9	0315.1	2.1	4	1		
	2000	TYKW	5	S	0314.9	0315.1	.5	9	3		
	9400	TYKW	31	ABS	0317.0	0505	275.0	-15	-11		
	650	GORK	4	S/F	0351.0	0352.2	4.8	29.0	3.0		
	2963	YUNN	2	S/F	0404.0	0405	7.0				RIF 15.
	950	GORK	3	S	0404.8	0406.0	4.2	53.0			
	100	GORK	8	S	0405.0	0405.8	1.7	2700.0D			
	200	GORK	8	S	0405.0	0405.8	1.5	60.0D			
	200	HIRA	46	C	0405.0	0405.8	8.0	1200	94		0
	1000	TYKW	5	S	0405.0	0406.0	15.0	56	10		
	2000	TYKW	5	S	0405.0	0406.0	10.0	47	6		
	100	HIRA	46	C	0405.1	0406.5	9.0	80000	3400		
	500	HIRA	3	S	0405.3	0405.6	7.0	130	20		WR
	650	GORK	3	S	0405.3	0406.0	9.7	50.0	11.0		
	3750	TYKW	5	S	0405.4	0405.9	6.0	22	3.5		
	9400	TYKW	5	S	0405.5	0405.9	1.0	8	1.5		
	950	GORK	29	PBI	0409.0	0409.0	37.0	11.0			
	650	GORK	29	PBI	0415.0	0415.0	43.6	4.5			
	1000	TYKW	29	PBI	0420.0		30.0	2	1		
	1000	TYKW	8	S	0531.0	0531.1	.2	26	7		
	1000	TYKW	8	S	0533.8	0533.9	.2	7	2		
	9100	GORK	2	S/F	0534.4	0535.9	3.9	16.0			
	9400	TYKW	45	C	0534.5	0535.2	3.5	22	8		
	15000	KISV	4	S/F	0535.0	0535.2	2.0	26			
	17000	NOBE	1	S	0535.1	0535.3	1.5	37			L
	9400	TYKW	29	PBI	0538.0		8.0	4	2		
	9395	PEKG	6	S	0551.0	0602	23.0	69.0	7.0		
	9400	TYKW	28	PRE	0601.0	0602.0	1.3	5	2		
	9100	GORK	3	S	0601.9	0602.5	2.6	80.0	40.0		
	11800	BERN	8	S	0602.1	0602.5	1.3	171.0			ONLY PAPER REC
	9400	TYKW	5	S	0602.3	0602.5	1.2	102	20		
	15000	KISV	8	S	0602.3	0602.4	.5	70			
	6100	KISV	8	S	0602.3	0602.5	.5	9			
	17000	NOBE	8	S	0602.4	0602.5	.4	146			L
	9400	TYKW	29	PBI	0603.5		.5D	4.5	4 D		
	9395	PEKG	42	SER	0611.0	0613	13.0	45.2	8.0		
	9400	TYKW	5	S	0619.5	0620.1	1.5	4	1.5		
	3750	TYKW	5	S	0632.0	0633.3	2.5	3	1.5		
	2000	TYKW	5	S	0632.0	0632.8	2.0	4	1		
	127	TORN	8	S	0632.5	0632.8	500.0	500	250		
	3659	YUNN	7	C	0647.0	0648	3.0				RIF 5.
	2963	YUNN	7	C	0648.0	0650	4.0				RIF 3.
	2950	GORK	20	GRF	0648.8	0651.0	15.5	6.0	3.0		
	6100	KISV	45	C	0649.0	0651	3.0	7			
	6100	KISV			0649.0	0650		6			
	2840	PEKG	41	F	0649.0	0650	6.6	5.2	2.0		
	3750	TYKW	45	C	0649.0	0651.2	15.0	7	1.5		
	9400	TYKW	45	C	0649.0	0651.0	3.0	7	2.5		
	9100	GORK	22	GRF	0649.4	0751.0	9.5	7.0	3.5		
	200	GORK	8	S	0649.4	0651.0	2.5	60.0D			
	204	IZMI	41	F	0649.5	0651.0	2.0	400			
	3100	CRIM	3	S	0655.0	0656.2	4.0	79	26		
	9100	GORK	23	GRF	0712.9	0910.4	218.0E	37.0			
	3750	TYKW	45	C	0716.0	0731.7	25.0	9	2		
	2000	TYKW	45	C	0731.0	0733.0	10.0	5	1.5		
	2950	GORK	1	S	0731.4	0733.0	9.5	8.0	4.0		
	2840	PEKG	45	C	0732.8	0734	4.0	10.0	4.0		
	2963	YUNN	2	S/F	0733.0	0734	2.0				RIF 4.
	1000	TYKW	8	S	0733.1	0733.2	.2	16	4		
	2000	TYKW	5	S	0746.0	0746.5	1.0	4.5	1.5		
	11800	BERN	20	GRF	0746.0	0756.1	27.0	35.0			ONLY PAPER REC
	8400	BERN	20	GRF	0746.0	0756.1	27.0	51.0			ONLY PAPER REC
	200	HIRA	27	RF	0746.7	0759.0	32.0	50	16		ML
	9375	YUNN	1	S	0749.0	0753	10.0				RIF 12.
	200	GORK	500	RF	0749.7	0807.0	36.5				
	204	IZMI	25	R	0750.0	0759.5	30.0	50	30		
	9400	TYKW	5	S	0752.0	0756.1	8.0	35	10		
	15000	KISV	4	S/F	0754.5	0756.1	4.0	18			
	6100	KISV	4	S/F	0754.5	0756	4.0	60			

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12	5730	IRKU	21 GRF	0755.0	0756.1	4.0	80	30		L
	9100	GORK	3 S	0755.0	0756.2	3.3	40.0	20.0		
	2950	GORK	3 S	0755.0	0755.9	2.5	60.0D			
	3750	TYKW	5 S	0755.0	0756.0	5.0	100	25		
	2000	TYKW	5 S	0755.0U	0756.2U	5.0U	15 U	3 U		INTERFERENCE
	2650	DWIN	2 S/F	0755.0	0756	4.0	50	20		
	3000	IZMI	5 S	0755.0	0756.1	4.0	72	30		
	3659	YUNN	2 S/F	0755.0	0756	6.0				RIF 49.
	2963	YUNN	23 GRF	0755.0	0756	8.0				RIF 23.
	10715	DWIN	1 S	0756.0	0756	1.0	25	15		
	2840	PEKG	3 S	0756.0	0757	16.0	57.0	8.2		
	2950	GORK	29 PBI	0757.5	0757.5	47.0	9.0	4.5		
	3750	TYKW	29 PBI	0800.0		10.0	6	3		
	9375	YUNN	22 GRF	0827.0	0836	24.0				RIF 5.4
	9395	PEKG	2 S	0845.6	0856	27.0	52.0	16.0		
	3200	BERN	20 GRF	0900.0	0910.1	60.0				ONLY PAPER REC
	8400	BERN	20 GRF	0900.0	0910.1	60.0	30.0			ONLY PAPER REC
	15000	KISV	27 RF	0900.0	0910.5	20.0	25			
	5200	BERN	20 GRF	0900.0	0910.1	60.0	23.0			ONLY PAPER REC
	11800	BERN	20 GRF	0900.0	0910.1	60.0	26.0			ONLY PAPER REC
	6100	KISV		0900.8	0901.5		8			
	6100	KISV	46 C	0900.8	0910.4	15.0	23			
	6100	KISV		0900.8	0903.7		13			
	9375	YUNN	20 GRF	0901.0	0907	25.0				RIF 6.
	3659	YUNN	20 GRF	0903.0	0909	24.0				RIF 5.
	2950	GORK	20 GRF	0908.0	0921.0	54.0	7.0	3.5		
	204	IZMI	8 S	0920.2	0920.2	0.8	600	450		
	9375	YUNN	7 C	0941.0	0945	7.0				RIF 7.
	5200	BERN	3 S	1030.0	1034.1	24.0	14.0			ONLY PAPER REC
	11800	BERN	3 S	1030.0	1034.1	24.0	56.0			ONLY PAPER REC
	8400	BERN	3 S	1030.0	1034.1	24.0	38.0			ONLY PAPER REC
	6100	KISV	45 C	1033.0	1034.1	2.0	19			
	10715	DWIN	2 S/F	1033.0	1034	3.0	60	30		
	9100	GORK	3 S	1033.3	1034.0	2.8	4.0	2.0		
	15000	KISV	45 C	1033.5	1034	2.0	32			
	3100	CRIM	26 FAL	1036.0	1100.0		7			
	6100	KISV	3 S	1127.5	1128.4	2.0	8			
	2800	OTTA	23 GRF	1155.0	1435	300.0	19.8			
	15000	KISV	1 S	1214.5	1215	1.0	7			
	6100	KISV	1 S	1214.5	1214.9	.5	9			
	8400	BERN	20 GRF	1241.5	1249.8	84.0	47.0			ONLY PAPER REC
	3200	BERN	20 GRF	1241.5	1341.5	84.0				ONLY PAPER REC
	11800	BERN	20 GRF	1241.5	1352.8	84.0	43.0			ONLY PAPER REC
	5200	BERN	20 GRF	1241.5	1249.8	84.0	23.0			ONLY PAPER REC
	19600	BERN	20 GRF	1241.5	1352.8	84.0	46.0			ONLY PAPER REC
	4995	ATHN	4 S/F	1242.0	1250.1	18.8D	30			
	8800	ATHN	4 S/F	1242.0	1247.1	24.8	47			
	6100	KISV	46 C	1242.0	1247.2	14.0	25			
	6100	KISV		1242.0	1242.6		15			
	6100	KISV		1242.0	1250		22			
	9400	HUAN	21 GRF	1242.1	1250.8	18.1	20.8	12.3		0
	15000	KISV	27 RF	1243.0	1251	15.0	17			
	9400	HUAN	2 S/F	1246.2	1247.2	1.6	29.4	14.9		0
	15400	SGMR	4 S/F	1323.8	1325.5	3.5	20			
	9400	HUAN	1 S	1324.4	1325.3	1.4	19.0	9.5		0
	4995	SGMR	4 S/F	1324.5	1325.3	3.3D	13			
	2800	OTTA	1 S	1324.5	1325	1.2	5.0	2.8		
	2695	SGMR	4 S/F	1324.6	1325.3	2.2D	08			
	8800	SGMR	8 S	1324.6	1325.6	1.7D	28			
	4995	ATHN	4 S/F	1336.6	1353.1	31.4D	32			
	8800	ATHN	4 S/F	1338.1	1353.1	29.9	40			
	2695	SGMR	4 S/F	1339.3	1341.6	5.7	35			
	2695	ATHN	4 S/F	1339.6	1341.8	28.4D	30			
	2650	DWIN	2 S/F	1340.0	1341	2.0	40	20		
	2800	OTTA	45 C	1341.0	1341.5	1.3	33.0	11.0		
	1415	ATHN	4 S/F	1342.1	1352.8	25.9D	07			
	2650	DWIN	2 S/F	1352.0	1353	2.0	40	10		
	2800	OTTA	4 S/F	1352.3	1352.5	3.0	19.6	4.9		
	9400	HUAN	3 S	1352.4	1353.1	1.6	29.4	13.6		0
	10715	DWIN	1 S	1353.0	1353	1.0	40	20		
	2800	OTTA	1 S	1602.5	1602.9	1.0	5.0	2.5		
	2650	DWIN	3 S	1606.0	1606	4.0	120	40		
	10715	DWIN	2 S/F	1606.0	1606	2.0	90	40		
	9400	HUAN	4 S/F	1606.1	1606.7	2.0	91.7	38.4		L
	35000	BERN	3 S	1606.1	1606.5	7.0	148.0			ONLY PAPER REC
	19600	BERN	3 S	1606.1	1606.5	15.0	148.0			ONLY PAPER REC
	11800	BERN	3 S	1606.1	1606.5	18.0	98.0			ONLY PAPER REC
	5200	BERN	3 S	1606.1	1606.5	18.0	120.0			ONLY PAPER REC
	3200	BERN	3 S	1606.1	1606.5	18.0				ONLY PAPER REC
	8400	BERN	3 S	1606.1	1606.5	18.0	74.0			ONLY PAPER REC
	2800	OTTA	3 S	1606.3	1606.7	4.0	132.0	30.0		
	2695	ATHN	8 S	1606.6	1606.8	2.0D	110			
	8800	ATHN	8 S	1606.6	1606.8	1.5	99			
	1415	ATHN	8 S	1606.6	1607.0	2.0D	44			
	4995	ATHN	8 S	1606.6	1606.8	1.5D	130			

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12	2800	OTTA	20 GRF	1705.0	1735	115.0	5.0	2.5		
	606	SGMR	8 S	1712.3	1712.6	.7	160			
	606	PALE	8 S	1712.5	1712.6	.3	180			
	2800	OTTA	21 GRF	1940.0	2200	320.0	35.0	15.2		
	2800	OTTA	20 GRF	1944.0	1948	15.0	12.0	6.0		
	606	PALE	8 S	1945.0	1945.1	.3	190			
	9400	HUAN	20 GRF	1945.6	1955.0	12.9	13.8	7.4		Ø
	15400	PALE	8 S	1949.0	1949.1	.1	26			
	9400	HUAN	4 S/F	2006.3	2006.8	2.0	121.1	48.2		R
	2695	PENT	3 S	2006.7	2007	6.0	85.0	15.6		
	2695	PALE	8 S	2006.8	2007.0	.8	75			
	8800	PALE	8 S	2006.8	2006.8	.3	130			
	1415	PALE	8 S	2006.8	2007.1	.5	28			
	4995	PALE	8 S	2006.8	2006.8	.5	74			
	15400	PALE	8 S	2006.8	2006.8	.3	119			
	3750	TYKW	45 C	2128.0	2142.2	27.0	280	65		
	2000	TYKW	45 C	2128.0	2142.4	27.0	195	45		
	9400	TYKW	45 C	2129.6	2142.1	41.0	200	57		
	4995	PALE	47 GB	2132.1	2142.1	50.0	250			
	9400	HUAN	21 GRF	2132.8	2156.5	59.4	77.9	55.4		RØL
	2695	PALE	47 GB	2133.0	2142.3	67.1	300			
	2800	OTTA	4 S/F	2134.0	2142.4	23.0	300.0	65.0		
	1000	TYKW	45 C	2135.0	2142.4	135.0	310	14		
	1415	PALE	4 S/F	2135.1	2142.1	19.2	300			
	200	HIRA	27 RF	2136.4	2202.3	122.0	1200	190		ML
	606	PALE	47 GB	2136.6	2138.8	68.0	200			
	245	PALE	47 GB	2136.8	2202.1	91.8D	460			
	17000	NOBE	20 GRF	2136.9	2142.1	12.5	82			R
	500	HIRA	46 C	2137.0	2138.8	27.0	200	60		MRML
	410	PALE	47 GB	2137.5	2146.6	67.1	210			
	8800	PALE	47 GB	2137.5	2142.1	59.1	260			
	9400	HUAN	45 C	2138.3	2141.9	6.7	140.2	53.1		R
	15400	PALE	47 GB	2139.6	2141.8	63.5	139			
	100	HIRA		2144.0	0031.4		4000			WR
	100	HIRA	48 C	2144.0	2235	345.0	16000	1400		SL
	35000	NAGO	20 GRF	2150.0U	2200 U	60.0U	35 U			SUNRISE
	2000	TYKW	30 PBI	2155.0		240.0	20	7		
	3750	TYKW	30 PBI	2155.0		240.0	33	12		
	3750	TYKW	5 S	2200.8	2201.4	1.2	10	4		
	2000	TYKW	5 S	2201.0	2201.4	1.0	4	1.5		
	2800	OTTA	1 S	2201.0	2201.5	1.0	5.2	2.6		
	3750	TYKW	29 PBI	2202.0		7.0	4	2		
	500	HIRA	30 PBI	2204.0	2215	145.0	30	20		SL
	208	VORO	29 PBI	2210.0E	2300	100.0D	245			
	9400	TYKW	30 PBI	2210.6		225.0	33	12		
	3750	TYKW	45 C	2215.0	2215.6	5.0	11	2.5		
	2000	TYKW	5 S	2215.0	2215.6	2.0	11	3		
	2800	OTTA	4 S/F	2215.0	2215.7	3.0	10.4	3.4		
	2000	TYKW	45 C	2226.0	2227.0	5.0	140	14		
	3750	TYKW	45 C	2226.5	2227.4	3.5	175	60		
	2800	OTTA	46F C	2226.5	2227.5	4.5	82.0	37.2		
	9400	HUAN	45 C	2226.6	2227.4	3.9	124.6	53.9		L
	17000	NOBE	1 S	2226.8	2227.5	6.0	54			R
	9400	TYKW	45 C	2226.8	2227.5	4.2	144	30		
	3750	TYKW	29 PBI	2230.0		25.0	18	7		
	9400	TYKW	29 PBI	2231.0		20.0	7	3		
	2695	PENT	29 PBI	2231.0	2231	18.0	14.6	7.3		
	500	HIRA	8 S	2234.6	2234.6	.5	80			SL
	1000	TYKW		2300.0	0137.7		33			
	1000	TYKW		2300.0	0021.3		86			
	1000	TYKW		2300.0	0043.2		40			
	1000	TYKW		2300.0	0009.5		29			
	2000	TYKW	45 C	2302.8	2304.3	2.5	4.5	2		
	3750	TYKW	45 C	2302.9	2303.3	3.0	51	7		
	9400	TYKW	45 C	2303.0	2304.3	4.0	14	2.5		
	2695	PENT	46F C	2303.0	2304.2	2.5	10.4	3.4		
	3750	TYKW	21 GRF	2320.0	2340	50.0	5	2		
	9400	TYKW	20 GRF	2321.0	2339	50.0	5	2.5		
	3750	TYKW	8 S	2338.4	2338.6	.4	5	1.5		
	2695	PENT	8 S	2338.7	2338.7	.2	6.0			
13	208	VORO	44 NS	0105.6E		175.0D		38		
	245	PALE	43 NS	0131.0	0342.0	179.0D	28			
	200	GORK	44 NS	0347.0E		523.0D		10.0		
	100	GORK	44 NS	0350.0E		490.0D		20.0		
	245	LEAR	43 NS	0448.8	0749.8	307.2D	330			
	127	TORN	44 NS	0600.0E	0819.3	600.0D	111000	54		V1
	204	IZMI	44 NS	0600.0E		360.0D	60			
	33	UPIC	43 NS	0635.5	1500.9	513.7D				
	29	UPIC	43 NS	0635.9		505.5D				
	260	ONDR	44 NS	0638.0E		442.0D	199.0D	12.0		
	410	LEAR	43 NS	0641.0	0929.8	195.0D	28			
	536	ONDR	43 NS	0749.0		343.0	42.0D			
	430	KRAK	44 NS	1001.5E	1010.7	37.5D	100.0	5.0		
	245	SGMR	43 NS	1010.0	1330.0	590.0D	1100			

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13	410	SGMR	43	NS	1010.0	1448.5	590.0D	330			
	245	PALE	43	NS	1700.0	2257.0	690.0D	240			
	200	HIRA	44	NS	2007.0E	2335	780.0D	120	20		WL
	100	HIRA	44	NS	2007.0E	2041	450.0D	350	20		
	3750	TYKW	5	S	0005.5	0005.8	1.5	1.5	.5		
	208	VORO	27	RF	0010.0	0020	55.0	200			
	2930	VORO	45	C	0015.0	0018	7.0	59			
	9400	TYKW	5	S	0016.0	0016.9	2.0	4	1.5		
	3750	TYKW	5	S	0016.6	0016.9	1.0	1.5	.5		
	3750	TYKW	31	ABS	0030.0	0055	70.0	-8	-4		
	9400	TYKW	31	ABS	0030.0	0055	50.0	-8	-4		
	2000	TYKW	31	ABS	0033.0	0055	40.0	-3	-1.5		
	3750	TYKW	45	C	0108.0	0114	20.0	9	3		
	245	LEAR	4	S/F	0127.3	0127.8	2.5	20			
	245	PALE	8	S	0127.6	0127.8	.5	25			
	410	PALE	4	S/F	0159.0	0200.6	3.6	30			
	9400	TYKW	45	C	0201.0	0202.6	3.0	21	7		
	245	LEAR	4	S/F	0201.8	0201.8	3.6	13			
	8800	LEAR	8	S	0202.5	0202.6	.1	16			
	3750	TYKW	21	GRF	0203.0	0210	35.0	2	1		
	9400	TYKW	30	PBI	0204.6		35.0	7	4		
	2000	TYKW	5	S	0205.0	0207	3.0	2	1		
	3750	TYKW	45	C	0206.0	0208.2	3.0	4	1		
	410	LEAR	8	S	0206.0	0206.5	.8	22			
	1000	TYKW	5	S	0206.8	0207.0	.5	6	2		
	9400	TYKW	45	C	0207.0	0208.2	9.0	12	4		
	1000	TYKW	5	S	0208.0	0208.2	.5	8	2		
	2000	TYKW	5	S	0208.0	0208.2	1.0	3	1		
	2963	YUNN	29	PBI	0222.0	0224	8.0				RIF 5.2
	9400	TYKW	5	S	0223.0	0223.3	.7	8	2		
	3750	TYKW	5	S	0223.0	0223.3	1.0	12	3		
	2000	TYKW	5	S	0223.0	0223.3	2.0	7	1.5		
	410	PALE	8	S	0223.1	0223.3	.2	110			
	606	PALE	47	GB	0223.1	0223.3	.2	1100			
	1415	LEAR	8	S	0223.1	0223.3	.2	06			
	4995	LEAR	8	S	0223.1	0223.3	1.5	10			
	606	LEAR	47	GB	0223.1	0223.3	.2	960			
	15400	LEAR	8	S	0223.1	0223.3	.5	07			
	2695	LEAR	8	S	0223.1	0223.3	1.7	11			
	8800	LEAR	8	S	0223.1	0223.3	1.5	08			
	410	LEAR	4	S/F	0223.3	0233.5	10.3	82			
	1000	TYKW	42	SER	0228.2	0228.3	1.0	11	2		
	3750	TYKW	5	S	0249.0	0252	20.0	4	1.5		
	9400	TYKW	21	GRF	0250.0	0340	140.0	5	2.5		
	8800	PALE	47	GB	0254.8	0258.8	11.8	23			
	3750	TYKW	45	C	0312.0	0323	25.0	3	1.5		
	606	LEAR	8	S	0332.8	0333.0	.3	11			
	410	LEAR	8	S	0335.6	0336.3	1.0	11			
	3750	TYKW	20	GRF	0340.0	0400	50.0	2	1		
	2000	TYKW	21	GRF	0340.0	0410	100.0	3	1.5		
	9400	TYKW	5	S	0341.0	0342.5	10.0	6	2		
	245	LEAR	8	S	0342.8	0343.0	.3	25			
	2000	TYKW	5	S	0346.5	0347.3	2.5	1	.4		
	2695	PALE	8	S	0419.3	0419.8	.2	18			
	15400	PALE	4	S/F	0419.5	0419.8	2.3	51			
	9400	TYKW	45	C	0420.5	0421.3	9.5	24	9		
	8800	PALE	4	S/F	0421.1	0421.6	2.2	40			
	9400	TYKW	29	PBI	0430.0		20.0	5	2.5		
	9100	GORK	22	GRF	0521.2	0533.7	23.8	12.0			
	2000	TYKW	21	GRF	0525.0	0555	85.0	3	1.5		
	1000	TYKW	21	GRF	0525.0	0610	90.0	2.5	1		
	9400	TYKW	5	S	0529.6	0530.0	1.0	6	1.5		
	1000	TYKW	45	C	0529.6	0529.9	.6	16	6		
	3750	TYKW	5	S	0529.6	0530.0	1.0	2	.5		
	2000	TYKW	5	S	0529.7	0530.0	1.0	1.5	.5		
	3659	YUNN	3	S	0530.0	0533	7.0				RIF 8.9
	2950	GORK	21	GRF	0530.0	0600.0	65.0	5.0	2.5		
	2840	PEKG	5	S	0531.6	0533	3.4				
	650	GORK	1	S	0532.0	0532.5	4.0	8.0	2.0		
	1000	TYKW	45	C	0532.0	0533.8	3.0	5	2		
	3750	TYKW	21	GRF	0532.0	0555	75.0	4.5	3		
	2000	TYKW	45	C	0532.0	0533.7	3.0	16	5		
	9400	TYKW	21	GRF	0532.0	0635	85.0	5	2.5		
	3750	TYKW	45	C	0532.0	0533.8	7.0	22	4		
	1415	LEAR	4	S/F	0532.3	0533.6	2.2	09			
	9400	TYKW	45	C	0532.5	0533.5	12.0	8	3		
	2950	GORK	1	S	0532.5	0533.7	1.8	17.0	8.0		
	6100	KISV	3	S	0532.5	0533.8	2.0	11			
	2695	LEAR	8	S	0532.8	0533.6	1.0	21			
	950	GORK	1	S	0533.0	0533.8	3.0	4.0	2.0		
	8800	LEAR	8	S	0533.1	0533.6	.2	15			
	606	LEAR	8	S	0533.3	0533.5	.5	16			
	4995	LEAR	4	S/F	0533.6	0533.6	427.2	13			
	245	LEAR	8	S	0534.8	0535.0	1.7	31			
	3750	TYKW	45	C	0539.0	0539.6	8.0	3	1		

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13	2000	TYKW	5	S	0539.4	0539.6	.6	1.5	.5		
	410	LEAR	47	GB	0635.5	0637.5	3.0	62			
	245	LEAR	8	S	0636.3	0637.3	.2	26			
	11800	BERN	20	GRF	0700.0	0738.2	73.0	21.0			ONLY PAPER REC
	8400	BERN	20	GRF	0700.0	0738.2	73.0	25.0			ONLY PAPER REC
	3200	BERN	21	GRF	0707.0	0755.8	98.0				ONLY PAPER REC
	5200	BERN	21	GRF	0707.0	0755.8	98.0	23.0			ONLY PAPER REC
	3750	TYKW	28	PRE	0710.0	0735	42.0	15	8		
	6100	KISV	27	RF	0710.0	0800	90.0	12			
	9400	TYKW	28	PRE	0713.0	0715.5	15.0	10	6		
	606	LEAR	8	S	0713.8	0714.0	.3	31			
	9100	GORK	23	GRF	0714.9	0740.7	84.6	20.0			
	2950	GORK	21	GRF	0718.0	0800.0	00.0	14.0	7.0		
	2000	TYKW	28	PRE	0720.0	0741	30.0	7	5		
	4995	LEAR	4	S/F	0726.5	0731.3	4.8	11			
	2695	LEAR	4	S/F	0726.5	0730.8	4.1	05			
	8800	LEAR	4	S/F	0726.5	0730.8	4.1	11			
	9400	TYKW	45	C	0728.0	0738.7	15.0	23	13		
	6100	KISV	45	C	0733.0	0739	9.0	7			
	2695	ATHN	4	S/F	0735.5	0741.8	9.1D	11			
	4995	ATHN	4	S/F	0737.0	0732.1	6.3D	06			
	8800	ATHN	4	S/F	0737.5	0738.8	5.1	11			
	9100	GORK	1	S	0737.8	0738.8	1.9	9.4	4.0		
	9400	TYKW	29	PBI	0743.6		50.0D	13	11 D		
	2000	TYKW	5	S	0750.0	0756	20.0	11	7		
	3750	TYKW	5	S	0752.0	0755.8	10.0	27	16		
	3100	CRIM	1	S	0754.0	0756.0	5.0	18	6		
	2950	GORK	1	S	0754.1	0756.0	3.8	10.0	5.0		
	3750	TYKW	29	PBI	0802.0		30.0D	11	7 D		
	2000	TYKW	29	PBI	0810.0		20.0U	4	2 U		
	606	LEAR	4	S/F	0817.5	0818.0	275.8	32			
	2950	GORK	1	S	0823.0	0820.7	.6	14.0	7.0		
	9375	YUNN	6	S	0831.0	0832	2.0				RIF 9.4
	2950	GORK	21	GRF	0847.0	1100.0	190.0D	10.0	5.0		
	9100	GORK	23	GRF	0857.5	1023.8	183.0E	23.0			
	650	GORK	23	GRF	0921.0	1040.9	189.0	12.0	4.0		
	2950	GORK	30	S	0930.5	0930.8	1.0	1.5			
	606	LEAR	8	S	0931.5	0932.0	.6	19			
	2950	GORK	1	S	0934.7	0935.0	1.0	5.0	2.5		
	606	LEAR	8	S	0934.8	0934.8	.3	62			
	410	LEAR	8	S	0934.8	0934.8	.3	71			
	606	LEAR	8	S	0943.5	0943.8	.6	45			
	950	GORK	21	GRF	0947.0	1030.0	106.0	8.0			
	810	KRAK	8	S	0947.3	0947.5	.3	21.0			
	2950	GORK	1	S	0951.2	0952.5	2.7	5.0	2.5		
	1415	LEAR	8	S	0951.6	0951.8	.2	13			
	606	LEAR	8	S	0951.8	0951.8	.2	370			
	245	LEAR	8	S	0951.8	0952.0	.8	170			
	410	LEAR	47	GB	0951.8	0951.8	.2	550			
	245	LEAR	47	GB	0954.6	0956.6	3.4D	570			
	5200	BERN	21	GRF	1002.0	1013.3	33.0	26.0			ONLY PAPER REC
	11800	BERN	21	GRF	1002.0	1013.3	33.0	21.0			ONLY PAPER REC
	3200	BERN	21	GRF	1002.0	1013.3	33.0				ONLY PAPER REC
	8400	BERN	21	GRF	1002.0	1013.3	33.0	21.0			ONLY PAPER REC
	9100	GORK	1		1007.9	1008.3	1.9	17.0	8.0		
	15000	KISV	46	C	1008.0	1013.5	10.0	8			
	6100	KISV	8	S	1008.2	1008.4	1.3	17			
	8800	ATHN	8	S	1008.6	1008.8	1.0	13			
	4995	ATHN	8	S	1008.6	1008.8	2.0D	31			
	2695	ATHN	4	S/F	1011.5	1013.8	11.6D	19			
	6100	KISV	45	C	1012.0	1013.5	6.0	14			
	8800	ATHN	4	S/F	1012.3	1014.0	6.7	17			
	4995	ATHN	4	S/F	1012.3	1014.0	11.8D	25			
	1415	ATHN	4	S/F	1012.3	1013.8	4.8D	36			
	9100	GORK	2	S/F	1013.0	1013.5	3.4	13.0	6.0		
	950	GORK	1	S	1013.1	1013.4	.7	7.0			
	3100	CRIM	1	S	1051.8	1052.6	2.0	4	1		
	930	BORD	41	F	1111.5	1111.5	.3	28	2		
	2950	GORK	150	S/F	1112.2	1113.3	5.4	7.5			
	3100	CRIM	1	S	1113.0	1113.6	3.5	13	4		
	930	BORD	8	S	1115.7	1115.9	.1	12	1		
	430	KRAK	42	SER	1121.0	1121.2	2.5	140.0			
	9100	GORK	1	S	1130.8	1130.8	.7	10.0	5.0		
	9100	GORK	1	S	1134.8	1135.3	2.4	7.8	3.5		
	2800	OTTA	1	S	1156.0	1157	2.0	3.0	1.3		
	606	SGMR	8	S	1156.3	1156.5	1.0	300			
	410	SGMR	8	S	1156.3	1157.1	1.0D	45			
	650	GORK	4	S/F	1156.4	1156.8	.5	45.0			
	2800	OTTA	1	S	1200.0	1200.5	2.0	2.4	1.2		
	430	KRAK	42	SER	1204.0	1208.0	17.5	360.0			
	430	KRAK			1204.0	1220.2		700.0			
	2800	OTTA	21	GRF	1205.0	1347	345.0	24.0	12.0		
	3200	BERN	3	S	1212.6	1213.2	7.0				ONLY PAPER REC
	5200	BERN	3	S	1212.6	1213.2	7.0	31.0			ONLY PAPER REC
	2650	DWIN	2	S/F	1213.0	1213	2.0	25	10		

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13	2695	SGMR	4 S/F	1213.0	1213.3	2.1D	27			
	2800	OTTA	45 C	1213.0	1213.3	2.0	26.8	6.7		
	6100	KISV	8 S	1213.0	1213.3	1.0	13			
	100	GORK	41 F	1213.0	1213.5U	1.8	600.0D			
	8800	ATHN	4 S/F	1213.1	1213.5	4.2	17			
	2695	ATHN	4 S/F	1213.1	1213.3	3.7D	21			
	127	TORN	8 S	1213.1	1213.6	1.0	35000 1	7000		
	4995	SGMR	8 S	1213.1	1213.3	.5	28			
	1415	ATHN	4 S/F	1213.1	1213.3	3.7D	15			
	245	SGMR	47 GB	1213.1	1213.3	1.9D	2100			
	4995	ATHN	4 S/F	1213.1	1213.5	3.7D	34			
	1415	SGMR	8 S	1213.1	1213.5	.7D	13			
	410	SGMR	8 S	1213.1	1213.1	1.9D	180			
	606	SGMR	8 S	1214.3	1214.3	.8D	110			
	810	KRAK	8 S	1215.0	1215.0	.3	33.0			
	606	SGMR	8 S	1242.5	1242.6	.5D	30			
	4995	SGMR	8 S	1242.6	1243.0	.7	07			
	2695	SGMR	8 S	1242.6	1243.0	.9D	11			
	6100	KISV	1 S	1242.7	1243	1.0	7			-
	2800	OTTA	1 S	1242.8	1243	1.0	6.0	3.0		
	1415	SGMR	8 S	1242.8	1243.0	1.2D	05			
	4995	ATHN	4 S/F	1246.6	1247.1	7.2D	11			
	1415	ATHN	4 S/F	1246.6	1247.1	10.9D	13			
	8800	ATHN	8 S	1246.6	1247.1	1.7	09			
	2695	ATHN	4 S/F	1246.6	1247.0	10.7D	07			
	430	KRAK	42 SER	1247.5	1247.5	13.0D	70.0			
	606	SGMR	8 S	1253.6	1254.1	.5	45			
	930	BORD	8 S	1255.0	1255	.1	12	1		
	606	SGMR	8 S	1258.6	1259.8	2.0D	250			
	2800	OTTA	1 S	1259.9	1300.2	1.0	4.0	2.0		
	2695	SGMR	8 S	1300.0	1300.3	.5	06			
	245	SGMR	47 GB	1308.8	1309.3	1.2D	1199			
	4995	ATHN	4 S/F	1309.1	1332.6	52.2D	32			
	1415	SGMR	8 S	1309.1	1309.3	.9D	15			
	410	SGMR	8 S	1309.1	1309.3	1.7D	119			
	1415	ATHN	4 S/F	1309.1	1331.6	55.0D	11			
	606	SGMR	47 GB	1309.1	1309.3	1.9D	2800			
	2695	ATHN	4 S/F	1309.1	1332.0	56.2D	13			
	2695	SGMR	8 S	1309.1	1309.5	.5	05			
	2800	OTTA	8 S	1309.2	1309.5	.5	3.4	1.7		
	930	BORD	41 F	1309.2	1309.2	.6	13	2		
	8800	ATHN	4 S/F	1316.6	1335.8	44.9	21			
	9400	HUAN	20 GRF	1320.3	1339.2	31.7	9.0	6.1		0
	4995	SGMR	8 S	1502.5	1503.1	1.3D	19			
	15400	SGMR	8 S	1502.6	1503.1	.7	23			
	5200	BERN	3 S	1502.7	1503.0	4.0	28.0			ONLY PAPER REC
	3200	BERN	3 S	1502.7	1503.0	4.0				ONLY PAPER REC
	2695	SGMR	8 S	1502.8	1503.1	1.3D	19			
	2800	OTTA	3 S	1502.9	1503.2	2.0	14.8	3.8		
	8800	SGMR	8 S	1503.0	1503.1	.6D	11			
	2800	OTTA	8 S	1729.0	1729.3	.5	4.8			
	2800	OTTA	23 GRF	1810.0	2250	430.0	28.4	18.3		
	1415	SGMR	47 GB	1846.1	1851.3	15.9	130			
	1415	PALE	47 GB	1847.3	1851.0	13.8	130			
	2695	PALE	8 S	1857.6	1858.3	.2	15			
	2800	OTTA	20 GRF	2025.0	2035	65.0	15.0	6.3		
	9400	HUAN	20 GRF	2030.8	2049.8	33.9	12.0	4.6		0
	2000	TYKW	20 GRF	2150.0	2255	150.0	7	3.5		
	3750	TYKW	20 GRF	2155.0	2306	145.0	18	9		
	9400	TYKW	21 GRF	2200.0	2304	140.0	15	7		
	1000	TYKW	45 C	2216.3	2216.4	.7	126	5		
	2930	VORO	45 C	2225.0	2227	20.0	177			
	1000	TYKW	8 S	2232.0	2232.2	.3	69	12		
	1000	TYKW	8 S	2234.1	2234.3	.3	19	2		
	9400	TYKW	5 S	2237.5	2338.0	3.5	7	2		
	410	LEAR	8 S	2317.6	2317.6	.2	47			
	410	PALE	8 S	2317.6	2317.6	.2	40			
	15400	LEAR	8 S	2341.1	2342.3	.2	15			
	1000	TYKW	45 C	2343.5	2343.8	1.0	28	6		
	410	PALE	8 S	2346.6	2346.8	.2	110			
	9400	TYKW	45 C	2350.0	2351	5.0	4	2		
14	200	GORK	44 NS	0400.0E		510.0D		5.0		
	127	TORN	44 NS	0600.0E	1007.7	600.0D	120	4		V1
	204	IZMI	44 NS	0600.0E		360.0D	80			
	260	ONDR	44 NS	0616.0E		475.0D	152.0	9.0		
	29	UPIC	43 NS	1003.6		431.4D				
	33	UPIC	43 NS	1003.8	1003.9	431.2D				
	410	SGMR	43 NS	1008.0	1803.0	532.0D	98			
	245	SGMR	43 NS	1008.0	1320.3	532.0D	720			
	200	HIRA	44 NS	2006.6E	0335	780.0D	70	25		WR
	208	VORO	44 NS	2200.0E		360.0D		29		
	245	LEAR	43 NS	2253.0	0936.1	662.0D	08			
	2695	PENT	30 PBI	0023.0	0023	90.0	47.0			
	9400	TYKW	28 PRE	0030.5	0031.6	4.0	6	3		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
14	3750	TYKW	5	S	0031.0	0036	15.0	3	1		
	9400	TYKW	45	C	0034.5	0035.0	3.5	47	14		
	9400	TYKW	29	PBI	0038.6		20.0	7	3		
	2695	PENT	21	GRF	0110.0	0120	30.0	7.8	4.0		
	2695	PENT	1	S	0115.0	0116	2.5	4.8	2.6		
	1000	TYKW	8	S	0121.4	0121.5	.3	10	1.5		
	2000	TYKW	21	GRF	0130.0	0145	35.0	2	1		
	3750	TYKW	21	GRF	0130.0	0210	90.0	4	1.5		
	1000	TYKW	45	C	0130.3	0130.4	.4	18	3		
	1000	TYKW	45	C	0135.3	0135.4	2.5	43	3.5		
	2000	TYKW	5	S	0135.4	0135.6	.8	2	.7		
	1000	TYKW	45	C	0207.3	0207.7	.6	65	10		
	1000	TYKW	45	C	0209.0	0209.4	.7	22	2		
	2000	TYKW	21	GRF	0220.0	0235	35.0	1.5	.7		
	3750	TYKW	21	GRF	0220.0	0230	30.0	5	2		
	9400	TYKW	21	GRF	0220.0	0235	50.0	5	2		
	3750	TYKW	5	S	0227.5	0228.3	1.5	3	1		
	2000	TYKW	5	S	0227.7	0228.0	1.0	14	4.5		
	9375	YUNN	2	S/F	0228.0	0228	1.0				RIF 9.2
	1000	TYKW	8	S	0241.6	0241.7	.2	17	4		
	9400	TYKW	5	S	0257.6	0258.4	2.5	2	1		
	2000	TYKW	21	GRF	0310.0	0422	140.0	6	2		
	3750	TYKW	21	GRF	0310.0	0421	140.0	13	4		
	9400	TYKW	20	GRF	0345.0	0420	100.0	10	4		
	9375	YUNN	24	R	0350.0	0423	99.0				RIF 6.9
	3659	YUNN	20	GRF	0350.0	0436					RIF 6.9
	2000	TYKW	45	C	0357.0	0401.3	6.0	9	2		
	1000	TYKW	45	C	0400.7	0400.8	2.0	5	1.5		
	3750	TYKW	5	S	0401.0	0401.2	1.0	1.5	.5		
	2000	TYKW	45	C	0404.5	0411.8	9.0	22	1.5		
	1000	TYKW	8	S	0410.7	0410.8	.2	25	8		
	9400	TYKW	5	S	0646.5	0646.8	1.5	5	1.5		
	3750	TYKW	5	S	0646.7	0646.9	.5	2	.5		
	430	KRAK			0700.0E	0837.0		600.0			
	430	KRAK	42	SER	0702.0E	0713 U	360.0D	800.0D			
	810	KRAK	42	SER	0712.8	0712.8	11.8	18.0			
	536	ONDR	42	SER	0714.0	0715.3	12.0	24.0			
	3750	TYKW	5	S	0724.5	0724.8	1.5	2.5	1		
	2000	TYKW	5	S	0724.5	0724.8	1.5	2	.5		
	3659	YUNN	1	S	0732.0	0733	2.0				RIF 5.5
	3200	BERN	3	S	0732.0	0733.5	2.5	6.0			ONLY PAPER REC
	15000	KISV	3	S	0732.0	0733	2.0	8			
	5200	BERN	3	S	0732.3	0733.5	2.5	18.0			ONLY PAPER REC
	3750	TYKW	5	S	0732.5	0733.5	2.5	11	4		
	9400	TYKW	5	S	0732.6	0733.4	1.4	10	5		
	9100	GORK	1	S	0732.8	0733.5	3.2	10.0	5.0		
	2950	GORK	1	S	0733.0	0733.6	1.0	3.0	1.5		
	9400	TYKW	29	PBI	0734.0		12.0	4	2		
	3750	TYKW	29	PBI	0735.0		6.0	1.5	.7		
	650	GORK	20	GRF	0754.8	1037.2	303.0	6.0			
	9100	GORK	21	GRF	0812.0	0846.9	182.0	17.0			
	2950	GORK	21	GRF	0832.0	0851.0	54.0	6.0	3.0		
	536	ONDR	42	SER	0832.0	0846.3	46.0	41.0			
	6100	KISV	1	S	0834.5	0835	1.5	3			
	8400	BERN	4	S/F	0841.1	0843.1	20.0	29.0			
	11800	BERN	4	S/F	0841.1	0843.1	20.0	25.0			
	3750	TYKW	45	C	0842.6	0843.2	5.0U	15	5 U		
	9400	TYKW	45	C	0842.0	0843.8	5.0U	36	10 U		
	3659	YUNN	2	S/F	0842.0	0843	6.0				RIF 7.6
	9375	YUNN	1	S	0842.0	0843	3.0				RIF 9.2
	6100	KISV	4	S/F	0842.0	0843	12.0	12			
	3200	BERN	4	S/F	0842.2	0843.0	25.0				ONLY PAPER REC
	5200	BERN	4	S/F	0842.2	0843.0	25.0	18.0			ONLY PAPER REC
	9100	GORK			0842.7	0843.9		31.0			
	9100	GORK	46	C	0842.7	0843.2	3.6	30.0			
	2950	GORK	1	S	0842.7	0843.2	2.0	14.0	7.0		
	15000	KISV	4	S/F	0843.0	0844	11.0	12			
	10715	DWIN	2	S/F	0843.0	0844	2.0	50	30		
	204	IZMI	8	S	0846.5	0846.5	.5	350	250		
	2950	GORK	1	S	0846.5	0847.1	1.3	5.0	2.5		
	204	IZMI	4	S/F	0900.0	0900.8	2.0	400	180		
	6100	KISV	21	GRF	0918.0	0921.2	7.0	11			
	3659	YUNN	1	S	0920.0	0921	2.0				RIF 6.2
	5200	BERN	3	S	0920.6	0921.1	7.0	21.0			ONLY PAPER REC
	3200	BERN	3	S	0920.6	0921.1	7.0				ONLY PAPER REC
	536	ONDR	8	S	1004.0	1004	.2	28.0			
	3100	CRIM	21	GRF	1005.0	1017.0	37.0	20	7		
	5200	BERN	21	GRF	1011.0	1015.0	45.0	28.0			ONLY PAPER REC
	3200	BERN	21	GRF	1011.0	1015.0	45.0				ONLY PAPER REC
	8400	BERN	21	GRF	1011.0	1015.0	45.0	19.0			ONLY PAPER REC
	15000	KISV	3	S	1012.0	1015.5	6.0	12			
	6100	KISV	4	S/F	1012.0	1015	6.0	14			
	3100	CRIM	1	S	1013.0	1014.0	3.0	15	5		
	2695	ATHN	4	S/F	1013.6	1015.0	12.0D	08			
	4995	ATHN	4	S/F	1013.6	1015.0	11.4D	35			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
14	8800	ATHN	4 S/F	1013.8	1015.0	11.8	18			
	2950	GORK	20 GRF	1013.9	1015.0	15.8	12.0	6.0		
	9100	GORK	1 S	1014.0	1015.0	2.9	12.0	6.0		
	6100	KISV	21 GRF	1018.0	1018	32.0	9			
	15000	KISV	45 C	1154.4	1155	2.0	6			
	6100	KISV	46 C	1155.6	1157.3	3.0	7			
	3200	BERN	1 S	1155.2	1156.1	37.0				ONLY PAPER REC
	5200	BERN	3 S	1155.2	1156.1	37.0	12.0			ONLY PAPER REC
	810	KRAK	42 SER	1155.5	1156.0	.8	55.0			
	9100	GORK	1 S	1155.6	1156.1	2.5	12.0	6.0		
	2695	SGMR	8 S	1155.6	1156.0	1.4D	06			
	1415	SGMR	8 S	1155.6	1156.1	1.0D	15			
	4995	SGMR	8 S	1155.6	1156.1	1.0D	11			
	9400	HUAN	2 S	1155.6	1156.3	1.6	15.0	8.3		0
	15400	SGMR	8 S	1155.8	1156.0	1.0	09			
	8800	SGMR	8 S	1155.8	1156.1	1.0D	19			
	2950	GORK	1 S	1155.8	1156.1	1.5	8.0	4.0		
	810	KRAK	8 S	1233.5	1233.5	.2	9.0			
	10715	DWIN	2 S/F	1239.0	1242	4.0	30	20		
	11800	BERN	3 S	1239.3	1241.8	18.0	24.0			
	8400	BERN	3 S	1239.3	1241.8	18.0	33.0			
	6100	KISV	21 GRF	1239.5	1240.3	8.0	13			
	9400	HUAN	45 C	1239.5	1240.9	4.1	31.6	18.5		0
	9400	HUAN		1239.5	1241.8		29.9			
	4995	SGMR	4 S/F	1239.6	1242.3	4.2D	09			
	8800	SGMR	4 S/F	1239.6	1242.1	4.4	37			
	9400	HUAN	29 PBI	1243.6	1243.6	9.8	10.0	2.3		0
	930	BORD	41 F	1252.0	1252.1	.6	13	2		
	536	ONDR	42 SER	1327.0	1338.2	15.0	43.0			
	3200	BERN	3 S	1333.5	1334.0	9.0				ONLY PAPER REC
	5200	BERN	3 S	1333.5	1334.0	9.0	28.0			ONLY PAPER REC
	9400	HUAN	3 S	1333.7	1334.1	2.0	26.6	8.3		L
	2800	OTTA	8 S	1333.7	1333.9	.7	21.8	10.9		
	4995	ATHN	8 S	1333.8	1334.3	1.2D	24			
	1415	ATHN	8 S	1334.0	1334.3	1.6	17			
	2650	DWIN	1 S	1334.0	1334	1.0	20	15		
	2800	OTTA	1 S	1336.4	1337	2.0	4.4	2.2		
	8800	ATHN	4 S/F	1339.3	1334.3	4.3D	28			
	606	SGMR	4 S/F	1502.3	1502.5	6.2D	460			
	930	BORD	8 S	1502.6	1502.6	.1	67	1		
	1415	SGMR	8 S	1502.8	1503.1	.5	31			
	410	SGMR	8 S	1507.3	1507.8	1.0D	380			
	606	SGMR	8 S	1507.8	1507.8	.7	280			
	930	BORD	8 S	1508.0	1508	.1	16	1		
	2800	OTTA	21 GRF	1520.0	1634	170.0	9.0	3.0		
	606	SGMR	47 GB	1530.1	1530.6	5.5	160			
	930	BORD	41 F	1534.8	1534.9	.4	12	2		
	930	BORD	41 F	1643.8	1644	.3	12	2		
	2800	OTTA	8 S	1646.0	1646.1	.3	9.8			
	3200	BERN	3 S	1648.3	1649.0	3.0				ONLY PAPER REC
	5200	BERN	3 S	1648.3	1649.0	3.0	28.0			ONLY PAPER REC
	9400	HUAN	1 S	1648.7	1649.7	2.0	10.0	5.6		0
	930	BORD	41 F	1649.0	1649.1	.2	25	1		
	2800	OTTA	3 S	1649.0	1649.8	2.5	34.6	17.0		
	606	SGMR	8 S	1658.1	1658.3	.7	119			
	2800	OTTA	1 S	1753.7	1755	7.0	5.0	2.5		
	2800	OTTA	24 OAR	1820.0	1845	25.0	5.0	2.4		
	2800	OTTA	8 S	1834.7	1834.7	.1	4.8			
	2800	OTTA	1 S	1841.0	1842	3.0	3.4	1.7		
	2800	OTTA	20 GRF	1846.6	1900	35.0	4.0	2.0		
	1415	PALE	4 S/F	1909.1	1909.3	2.4	30			
	2800	OTTA	1 S	1953.5	1953.9	1.0	4.0	1.8		
	2695	PENT	1 S	2003.2	2003.7	2.5	2.8	1.4		
	2800	OTTA	21 GRF	2017.0	2040	60.0	4.6	2.0		
	2800	OTTA	1 S	2042.3	2042.6	1.5	2.0	1.0		
	500	HIRA	46 C	2050.0	2050.7	1.0	1000	200		WL
	9400	HUAN	3 S	2050.0	2050.3	1.3	79.9	30.8		L
	1000	TYKW	45 C	2050.0	2050.5	4.0U	60 U	15 U		
	606	PALE	47 GB	2050.1	2050.3	2.7	570			
	2800	OTTA	3 S	2050.1	2050.4	6.0	43.0	10.8		
	8800	PALE	4 S/F	2050.3	2050.3	3.0	98			
	2695	PALE	4 S/F	2050.3	2050.5	3.7	42			
	410	PALE	47 GB	2050.3	2050.3	2.2	750			
	15400	PALE	4 S/F	2050.3	2050.3	3.0	91			
	4995	PALE	4 S/F	2050.3	2050.3	3.0	40			
	1415	PALE	4 S/F	2050.3	2050.6	3.2	47			
	2000	TYKW	28 PRE	2215.0	2315.3	72.0	5	1.5		
	3750	TYKW	28 PRE	2216.0	2218.6	71.0	15	4		
	9400	TYKW	28 PRE	2216.0	2218.7	72.0	16	6		
	2800	OTTA	21 GRF	2216.0	2220	18.0	4.8	2.4		
	2695	PALE	8 S	2217.8	2218.6	1.2	17			
	2800	OTTA	1 S	2218.0	2218.7	1.5	2.8	1.4		
	8800	PALE	8 S	2218.3	2218.6	1.3	26			
	4995	PALE	8 S	2218.3	2218.6	.8	21			
	1000	TYKW	5 S	2218.5	2219.1	1.5	8	1		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
14	2695	PENT	2B PRE	2314.0	2326	14.0	9.4			
	1000	TYKW	8 S	2326.0	2326.1	.3	10	2.5		
	3750	TYKW	47 GB	2327.0	2353.2	60.0	1650	480		
	2000	TYKW	47 GB	2327.0	2353.8	60.0	960	290		
	500	HIRA	48 C	2327.0	2342.4	60.0	500	90		MR
	5730	IRKU		2327.3	2346.7		1180			R
	5730	IRKU		2327.3	2353.2		1200			R
	5730	IRKU		2327.3	2340.2		970			R
	5730	IRKU	47 GB	2327.3	2333.5	56.0	150			R
	17000	NOBE	28 PRE	2327.7	2333.0	5.3	23			L
	1000	TYKW	8 S	2327.7	2327.8	.3	14	4		
	9400	TYKW	47 GB	2328.0	2346.6	60.0	2020	560		
	1000	TYKW	45 C	2328.0	2358.7	60.0	350	105		
	2695	PENT	47 GB	2328.0	2353.5	55.0	1470.0	531.0		
	2695	PALE	47 GB	2328.1	2343.0	192.4D	1399			
	4995	PALE	47 GB	2329.0	2353.1	58.3D	1500			
	1415	PALE	47 GB	2329.1	2355.3	58.2D	630			
	4995	LEAR	47 GB	2329.5	2352.8	55.1D	1700			
	8800	LEAR	47 GB	2329.5	2346.6	17.1D	2000			
	8800	PALE	47 GB	2329.5	2346.5	57.7D	2600			
	2695	LEAR	47 GB	2329.5	2343.0	53.1D	2800			
	1415	LEAR	47 GB	2329.6	2352.6	53.5D	580			
	606	LEAR	47 GB	2329.6	2349.6	45.2D	310			
	15400	LEAR	47 GB	2329.8	2346.3	16.5D	1500			
	15400	PALE	47 GB	2333.0	2346.3	52.8D	1800			
	606	PALE	47 GB	2333.0	2349.6	45.3D	330			
	17000	NOBE	47 GB	2333.0	2346.5	38.0	1400			L
	410	LEAR	4 S/F	2336.3	2342.6	545.8D	350			
	410	PALE	47 GB	2336.5	2342.6	30.6D	520			
	35000	NAGO	7 C	2338.0	2347	18.0	214			
	208	VORO	46 C	2338.0	2343	20.0	140			
	208	VORO		2338.0	2348		119			
	208	VORO		2338.0	2351		180			
	245	LEAR	47 GB	2339.3	2343.8	20.3	490			
	245	PALE	47 GB	2339.6	2343.5	17.4	640			
15	410	LEAR	43 NS	0330.0	0330.5	319.5	61			
	200	GORK	44 NS	0353.0E		538.0D		25.0		
	100	GORK	44 NS	0357.0E		513.0D		10.0		
	127	TORN	44 NS	0600.0E	1203.7	600.0D	15000	60		V1
	204	IZMI	44 NS	0600.0E		360.0D	50			
	260	ONDR	44 NS	0610.0E		479.0D	209.0D	12.0		
	29	UPIC	43 NS	0642.5	1203.7	519.3D				
	33	UPIC	43 NS	0642.6	1203.4	519.2D				
	100	HIRA	43 NS	0716.0	0836.0	110.0D	190 U	35 U		MR SUNSET
	410	PALE	43 NS	1632.0	1903.5	723.0D	78			
	245	PALE	43 NS	1632.0	1913.5	723.0D	160			
	245	PALE	43 NS	1821.8	2052.1	614.2	220			
	200	HIRA	44 NS	2004.0E	2225	780.0D	70	10		ML
	100	HIRA	43 NS	2114.0	2314.5	576.0D	650	70		
	208	VORO	44 NS	2200.0E		360.0D		22		
	245	LEAR	43 NS	2253.0	0249.8	661.0D	88			
	245	LEAR	43 NS	2253.0	0936.1	662.0D	88			
	410	LEAR	43 NS	2335.1	0902.8	618.9D	52			
	2000	TYKW		.0	0701.7		32			
	17000	NOBE	29 PBI	0011.0	0011.0	20.0	59			0
	3750	TYKW	30 PBI	0027.0		235.0	35	17		
	2000	TYKW	30 PBI	0027.0		235.0	20	10		
	9400	TYKW	30 PBI	0028.0		230.0	43	20		
	1000	TYKW	30 PBI	0028.0		235.0	10	2.5		
	1000	TYKW	5 S	0042.0	0042.6	1.0	7	1		
	2695	LEAR	8 S	0053.0	0853.1	.1	18			
	9400	TYKW	21 GRF	0112.6	0122	65.0	12	5		
	2000	TYKW	21 GRF	0112.0	0121	75.0	5	2		
	3750	TYKW	45 C	0112.0	0116.3	12.0	28	9		
	9375	YUNN	1 S	0114.0	0116	4.0				RIF 7.4
	3659	YUNN	1 S	0114.0	0116	4.0				RIF 8.7
	2000	TYKW	5 S	0115.0	0116.0	4.0	8	3		
	1000	TYKW	5 S	0115.0	0116.3	4.0	5	2		
	9400	TYKW	5 S	0115.0	0116.3	4.0	26	12		
	5730	IRKU	20 GRF	0115.0	0116.4	3.0	40	27		L
	17000	NOBE	20 GRF	0115.5	0116.4	17.0	23			0
	3750	TYKW	29 PBI	0124.0		60.0	9	4		
	2000	TYKW	45 C	0218.0	0218.3	1.0	7	1.5		
	1000	TYKW	42 SER	0237.0	0238.0	1.3	8	2.5		
	1000	TYKW	45 C	0303.5	0303.9	2.0	7	1.5		
	2000	TYKW	5 S	0325.0	0325.6	1.0	2.5	1		
	3750	TYKW	5 S	0325.4	0325.6	.5	4	1		
	1000	TYKW	8 S	0325.5	0325.6	.4	6	2		
	1000	TYKW	8 S	0331.0	0331.3	.4	12	2.5		
	1000	TYKW	45 C	0341.1	0341.2	.4	63	20		
	1000	TYKW	42 SER	0345.5	0347.0	1.7	19	3		
	2000	TYKW	5 S	0345.5	0346.0	1.5	1.5	.5		
	1000	TYKW	42 SER	0401.0	0402.4	2.0	24	2.5		
	3750	TYKW	5 S	0430.0	0430.8	8.0	2.5	1		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
15	9400	TYKW	5	S	0430.5	0430.8	1.5	6	1.5		
	2000	TYKW	5	S	0430.6	0430.9	.7	15	5		
	3750	TYKW	21	GRF	0443.0	0514	100.0	8	3.5		
	2000	TYKW	21	GRF	0445.0	0515	100.0	4	2		
	3659	YUNN	1	S	0449.0	0451	11.0				RIF 3.7
	2950	GORK	21	GRF	0449.3	0930.0	460.0E	16.0			
	2000	TYKW	45	C	0450.0	0451.5	7.0	5	2		
	3750	TYKW	45	C	0450.0	0451.3	7.0	8	3		
	9400	TYKW	21	GRF	0451.0	0512	95.0	11	4		
	3750	TYKW	5	S	0458.0	0458.8	3.0	5.5	1.5		
	8800	ATHN	4	S/F	0522.5	0527.1	9.1	35			
	8800	ATHN	4	S/F	0525.5	0527.1	6.1	35			
	1000	TYKW	45	C	0526.7	0527.1	1.0	9	2		
	8800	ATHN	47	GB	0527.1	0531.6	4.5D	35			
	100	GORK	46	C	0527.8	0530.5	4.0	190.0D			
	100	GORK			0527.8	0531.0		190.0D			
	100	GORK			0527.8	0531.6		190.0D			
	950	GORK	4	S/F	0528.0	0529.6	1.7	100.0			
	2840	PEKG	45	C	0528.0	0529.7	8.0	13.0	2.3		
	1000	TYKW	45	C	0529.0	0529.7	2.0	172	25		
	3750	TYKW	5	S	0529.3	0529.7	.7	14	5		
	2695	ATHN	4	S/F	0529.3	0529.6	20.5D	08			
	1415	ATHN	4	S/F	0529.3	0529.8	4.5D	81			
	4995	ATHN	4	S/F	0529.3	0529.6	13.5D	07			
	2950	GORK	1	S	0529.3	0529.5	.8	12.0	6.0		
	9100	GORK	1	S	0529.4	0529.6	.5	5.0	2.5		
	2000	TYKW	5	S	0529.4	0529.7	.8	7	2		
	3100	CRIM	1	S	0531.2	0531.5	1.0	11	4		
	2840	PEKG	5	S	0536.0	0537.8	3.0	14.0	11.0		
	1000	TYKW	45	C	0536.0	0537.0	1.5	4	.7		
	3750	TYKW	45	C	0536.2	0537.7	3.0	18	4.5		
	2950	GORK	3	S	0536.3	0537.3	2.0	13.0	6.0		
	9400	TYKW	45	C	0536.5	0537.0	2.5	5	1.5		
	2000	TYKW	45	C	0536.5	0537.8	2.0	6	2.5		
	9100	GORK	1	S	0536.6	0537.0	1.9	4.0	2.0		
	3100	CRIM	1	S	0536.8	0538.2	2.0	13	4		
	3200	BERN	3	S	0558.2	0600.3	4.0	56.0			
	5200	BERN	3	S	0558.2	0600.3	4.0	60.0			
	8400	BERN	3	S	0558.6	0600.4	4.0	47.0			
	2840	PEKG	5	S	0559.0	0600.5	5.5	60.0	9.0		
	9375	YUNN	8	S	0559.0	0600	2.0				RIF 5.6
	3659	YUNN	3	S	0559.0	0600	2.0				RIF 31.1
	2695	ATHN	4	S/F	0559.3	0600.3	5.3D	119			
	6100	KISV	8	S	0559.5	0600.5	1.5	29			
	4995	ATHN	4	S/F	0559.6	0600.3	4.5D	110			
	950	GORK	4	S/F	0559.7	0600.4	.9	84.0			
	9100	GORK	1	S	0559.8	0600.5	1.8	20.0	10.0		
	1415	ATHN	47	GB	0559.8	0600.3	5.0D	1199			
	1415	LEAR	47	GB	0559.8	0600.5	.8	2100			
	1000	TYKW	5	S	0559.8	0600.0U	.2D	100 D	30 D		
	9400	TYKW	5	S	0600.0	0600.4	2.0	15	3		
	2000	TYKW	5	S	0600.0	0600.5	3.0	80	10		
	3000	IZMI	8	S	0600.0	0600.3	1.0	86	60		
	2950	GORK	3	S	0600.0	0600.3	3.3	47.0			
	3100	CRIM	3	S	0600.0	0600.5	2.0	63	21		
	9395	PEKG	5	S	0600.0	0600.6	3.0	11.0	8.1		
	4995	LEAR	8	S	0600.1	0600.3	.5	57			
	8800	ATHN	8	S	0600.1	0600.3	.9	16			
	2695	LEAR	8	S	0600.1	0600.3	.5	65			
	8800	LEAR	8	S	0600.1	0600.3	.4	21			
	2695	MANI	8	S	0601.0	0601.5	1.0D	58			
	1415	MANI	47	GB	0601.0	0601.5	1.0D	1399			
	4995	MANI	8	S	0601.0	0601.5	1.0	57			
	2000	TYKW	29	PBI	0603.0		15.0	2	1		
	3100	CRIM	31	ABS	0603.0	0624.0		5			
	1000	TYKW	45	C	0632.5	0632.7	.6	2.5	.7		
	3750	TYKW	28	PRE	0633.0	0639	9.0	7	4		
	950	GORK	21	GRF	0633.0		34.6				
	950	GORK	1	S	0633.5	0633.6	.6	14.0			
	1000	TYKW	45	C	0633.5	0633.8	.8	13	4		
	2000	TYKW	28	PRE	0635.0	0642	7.0	3	1.5		
	19600	BERN	47	GB	0637.7	0643.6	42.0	1042.0			
	11800	BERN	47	GB	0637.7	0643.6	42.0	590.0			
	5200	BERN	41	F	0637.7	0643.6	45.0	339.0			
	8400	BERN	47	GB	0637.7	0643.6	42.0	613.0			
	3200	BERN	41	F	0637.7	0643.7	45.0	138.0			
	3100	CRIM	28	PRE	0637.8	0639.8	4.0	5	2		
	9100	GORK	4	S/F	0638.0	0640.7	7.7	690.0			
	9395	PEKG	3	S	0638.0	0643.7	32.0	632.0	79.0		
	9400	TYKW	28	PRE	0638.0	0639	4.0	12	8		
	3659	YUNN	3	S	0638.0	0643	10.0				RIF 91.5
	2695	ATHN	4	S/F	0638.3	0643.8	31.5D	110			
	4995	ATHN	4	S/F	0638.3	0643.6	30.3D	300			
	2950	GORK	3	S	0638.4	0643.7	4.2	136.0			
	8800	ATHN	47	GB	0638.5	0643.8	26.8	650			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
15	1415	ATHN	4 S/F	0640.3	0654.3	31.2D	100			
	9375	YUNN	47 GB	0641.0	0643.5	6.0				RIF 129.6E
	6100	KISV	4 S/F	0641.0	0643.7	7.0	250			
	2840	PEKG	3 S	0641.0	0643.7	6.7	142.0	38.0		
	3100	CRIM	3 S	0641.8	0643.6	6.0	157	52		
	15000	KISV	4 S/F	0642.0	0643.6	5.0	560			
	5730	IRKU	2 S	0642.0	0643.6	7.0	270	63		R
	536	ONDR	42 SER	0642.0	0701.8	23.0	56.0D			
	2650	DWIN	3 S	0642.0	0643	5.0	120	50		
	10715	DWIN	3 S	0642.0	0644	6.0	820	400		
	3750	TYKW	5 S	0642.0	0643.8	6.0	240	55		
	9400	TYKW	47 GB	0642.0	0643.8	6.0	720	120		
	2000	TYKW	5 S	0642.0	0643.8	6.0	70	15		
	17000	NOBE	45 C	0642.3	0643.7	4.7	691			L
	100	HIRA	46 C	0642.5	0643.3	1.6	470	140		0
	3000	IZMI	5 S	0642.5	0644.0	3.5	190	120		
	100	GORK		0642.5	0643.5U		270.0D			
	100	GORK		0642.5	0642.9		270.0D			
	100	GORK	46 C	0642.5	0642.7	1.9	270.0D			
	200	GORK	4 S/F	0642.8	0643.4	1.2	180.0			
	500	HIRA	46 C	0642.9	0643.2	1.0	60	30		0
	930	BORD	3 S	0643.0	0643.7	3.0	32	7		
	35000	NAGO	5 S	0643.0	0643	1.0	60			
	1000	TYKW	5 S	0643.0	0643.7	3.0	35	8		
	650	GORK	3 S	0643.1	0643.6	1.3	14.0			
	950	GORK	3 S	0643.1	0643.7	4.1	36.0			
	650	GORK	30 PBI	0644.4	0644.5	28.4	4.0			
	9100	GORK	30 PBI	0645.7	0645.8	218.0	48.0			
	17000	NOBE	30 PBI	0647.0	0647.0	24.0	12			0
	3750	TYKW	30 PBI	0648.0		110.0D	8	5 D		
	2000	TYKW	30 PBI	0648.0		110.0D	4	3 D		
	9400	TYKW	30 PBI	0648.0		112.0D	16	9 D		
	9395	PEKG	29 PBI	0648.0		28.0	15.0	8.0		
	2000	TYKW	28 PRE	0650.0	0656.5	7.0	3	.5		
	3659	YUNN	42 SER	0650.0	0657	14.0				RIF 37.4
	500	HIRA	46 C	0656.8	0657.3	1.0	30	12		0
	930	BORD	46 C	0657.0	0659.4	8.0	150	14		
	2650	DWIN	41 F	0657.0	0658	8.0	50	20		
	2000	TYKW	45 C	0657.0	0657.9	8.0	53	10		
	3750	TYKW	45 C	0657.0	0657.8	3.0	86	12		
	1000	TYKW	45 C	0657.0	0659.5	10.0	180	25		
	2695	MANI	47 GB	0657.6	0659.1	8.6D	58			
	2840	PEKG	42 SER	0657.0	0657.8	16.0	143.0	8.3		
	808	ONDR	41 F	0657.0	0657.8	7.0	48.0	5.0		
	3100	CRIM	3 S	0657.0	0657.8	2.0	68	23		
	430	KRAK	42 SER	0657.0E	0657.3	18.0D	800.0D			
	650	GORK		0657.1	0701.4		135.0			
	2950	GORK	45 C	0657.1	0657.6	7.2	36.0			
	2950	GORK		0657.1	0704.0		16.0			
	2950	GORK		0657.1	0701.7		25.0			
	2950	GORK		0657.1	0657.9		40.0D			
	650	GORK		0657.1	0657.6		52.0			
	650	GORK	46 C	0657.1	0657.4	5.3	54.0			
	1415	LEAR	4 S/F	0657.1	0659.5	5.5	100			
	200	HIRA	46 C	0657.2	0657.6	.8	1300	255		0
	950	GORK	45 C	0657.2	0657.9	11.0	26.0			
	950	GORK		0657.2	0659.8		180.0			
	606	LEAR	8 S	0657.3	0657.6	.3	160			
	9400	TYKW	45 C	0657.4	0657.9	1.0	37	10		
	9100	GORK	3 S	0657.4	0657.9	.7	43.0			
	6100	KISV	8 S	0657.5	0658	.8	45			
	15000	KISV	45 C	0657.5	0658	1.0	14			
	100	HIRA	46 C	0657.5	0657.8	1.0	940	250		WR
	204	IZMI	5 S	0657.5	0657.9	.8	870	500		
	15400	LEAR	8 S	0657.5	0657.8	.8	20			
	410	LEAR	47 GB	0657.5	0657.6	.6	530			
	2695	LEAR	8 S	0657.5	0657.8	.8	62			
	8800	LEAR	4 S/F	0657.6	0657.8	595.2	46			
	4995	LEAR	8 S	0657.6	0657.8	.4	92			
	245	LEAR	47 GB	0657.6	0657.6	.5	2300			
	17000	NOBE	2 S/F	0657.6	0657.9	.7	24			L
	100	GORK	8 S	0657.7	0658.8	.8	3000.0			
	810	KRAK	8 S	0657.8	0657.8	.1	270.0			
	228	HARS	1 S	0658.0	0658.2	1.0	350	90		
	1415	MANI	47 GB	0658.3	0659.1	5.2D	119			
	606	MANI	47 GB	0658.3	0702.3	4.7D	220			
	4995	MANI	47 GB	0658.3	0659.0	7.0D	86			
	8800	MANI	8 S	0658.3	0659.0	1.0	57			
	245	LEAR	4 S/F	0700.1	0701.6	2.5	139			
	410	LEAR	8 S	0700.8	0701.8	1.3	55			
	606	LEAR	47 GB	0700.8	0701.1	1.2	580			
	2695	LEAR	4 S/F	0701.0	0701.8	3.3	35			
	6100	KISV	45 C	0701.0	0701.8	5.0	12			
	3100	CRIM	42 SER	0701.0	0701.6	3.0	27	9		
	3100	CRIM		0701.0	0703.8		16	5		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
15	4995	LEAR	4 S/F	0701.1	0701.6	3.2	22			
	9400	TYKW	5 S	0701.3	0701.6	1.5	6	2		
	3750	TYKW	45 C	0701.3	0701.7	3.0	31	6		
	2800	TYKW	29 PBI	0705.0		55.0	4	1.5		
	1000	TYKW	8 S	0708.1	0708.2	.2	28	7		
	3750	TYKW	45 C	0713.0	0715	7.0	6	2		
	430	KRAK		0756.0	1108.0		400.0			
	430	KRAK		0756.0	1204.0		45.0U			
	430	KRAK	42 SER	0756.0	0856.2	304.0D	140.0			
	430	KRAK		0756.0	1035.3		400.0			
	9400	TYKW	45 C	0803.0	0821.3	37.0D	12	6	D	
	3750	TYKW	45 C	0803.0	0806.3	35.0D	11	3	D	
	2800	TYKW	45 C	0805.0	0806.4	33.0D	8	1	D	
	3100	CRIM	21 GRF	0805.0	0806.0	75.0	9	3		
	2840	PEKC	1 S	0805.0	0806.4	4.4	8.0	2.0		
	950	GORK	2 S/F	0816.5	0817.4	1.5	14.0			
	808	ONDR	42 SER	0817.0	1022.5	127.0	58.0			
	930	BORD	41 F	0817.2	0817.4	.8	14	2		
	950	GORK	4 S/F	0820.7	0824.3	.7	120.0			
	930	BORD	46 C	0820.8	0821	.6	150	8		
	1000	TYKW	45 C	0820.8	0821.3	.7	250	70		
	1415	LEAR	8 S	0821.0	0821.1	.3	34			
	650	GORK	46 C	0822.9	0826.3	5.2	36.0			
	650	GORK		0822.9	0827.3		46.0			
	930	BORD	42 SER	0826.5	0832.7	9.5	38	2		
	1000	TYKW	8 S	0831.1	0831.3	.3	15	5		
	950	GORK	4 S/F	0831.2	0832.7	5.1	24.0			
	536	ONDR	42 SER	0832.0	1010.5	99.0	41.0			
	1000	TYKW	45 C	0832.0	0832.7	2.5	21	7		
	3100	CRIM	1 S	0835.0	0835.5	1.0	5	2		
	3200	BERN	41 F	0851.7	0853.0	7.0	22.0			
	5200	BERN	41 F	0851.7	0853.0	7.0	23.0			
	3659	YUNN	42 SER	0852.0	0857	6.0				RIF 12.5
	410	LEAR	8 S	0852.5	0853.1	.6	33			
	6100	KISV	1 S	0852.5	0853	2.0	9			
	810	KRAK	42 SER	0852.8	0853.0	4.5	82.0			
	3100	CRIM	1 S	0852.9	0853.0	.5	18	5		
	245	LEAR	8 S	0853.0	0853.1	.3	210			
	4995	LEAR	8 S	0853.0	0853.1	.1	24			
	1415	LEAR	8 S	0853.0	0853.1	.1	13			
	228	HARS	1 S	0853.0	0853.1	.4	225	95		
	204	IZMI	8 S	0853.0	0853.3	.5	630	500		
	930	BORD	46 C	0853.0	0853.2	.5	42	3		
	15400	LEAR	4 S/F	0854.0	0854.1	348.1	18			
	410	LEAR	8 S	0855.6	0855.8	.4	19			
	3100	CRIM	1 S	0856.0	0857.1	2.0	18	5		
	6100	KISV	1 S	0856.5	0857.3	2.0	8			
	2695	LEAR	8 S	0857.1	0857.3	.2	16			
	15400	LEAR	4 S/F	0857.1	0857.8	480.0	18			
	4995	LEAR	4 S/F	0857.1	0857.3	354.4	21			
	1415	LEAR	4 S/F	0857.3	0857.3	834.6	11			
	650	GORK	22 GRF	0932.3	1042.6	123.0	7.0			
	245	LEAR	8 S	0943.8	0944.1	.7	480			
	410	LEAR	8 S	0946.1	0946.6	1.2	78			
	245	LEAR	8 S	0947.3	0947.5	.2	66			
	410	LEAR	8 S	0949.6	0949.6	.2	52			
	930	BORD	41 F	1000.8	1001.5	1.3	28	2		
	930	BORD	42 SER	1010.0	1021.8	16.5	30	2		
	810	KRAK	42 SER	1010.0	1021.5	12.7	430.0			
	6100	KISV	4 S/F	1021.0	1022.5	3.0	1			
	2650	DWIN	1 S	1021.0	1022	2.0	20	10		
	3200	BERN	4 S/F	1021.4	1022.4	2.5	29.0			
	3100	CRIM	3 S	1021.5	1022.3	2.0	31	10		
	950	GORK	4 S/F	1021.6	1026.6	8.1	17.5			
	2950	GORK	3 S	1021.6	1022.4	1.5	30.0	15.0		
	5200	BERN	4 S/F	1022.1	1022.4	4.0	32.0			
	930	BORD	41 F	1038.3	1038.6	1.3	21	1		
	3100	CRIM	40 F	1102.0	1148.0	48.0	13	4		
	245	SGMR	4 S/F	1104.0	1108.3	6.5	91			
	9100	GORK	22 GRF	1105.3	1116.0	23.3	8.0			
	6100	KISV	45 C	1106.0	1108.8	18.0	7			
	6100	KISV		1106.6	1116.2		7			
	410	SGMR	4 S/F	1108.0	1109.5	2.5D	95			
	2950	GORK	1 S	1108.3	1109.6	2.0	4.0	2.0		
	930	BORD	8 S	1125.0	1125.1	.1	14	1		
	950	GORK	4 S/F	1158.7	1203.8	8.7	89.0			
	3200	BERN	41 F	1201.4	1204.3	18.0	45.0			
	930	BORD	41 F	1201.4	1203.8	7.0	132	4		
	8400	BERN	41 F	1201.8	1204.3	17.0	21.0			
	808	ONDR	2 S/F	1202.0	1203.6	10.0	45.0	6.0		
	536	ONDR	4 S/F	1202.5	1208.2	3.5	46.0	3.0		
	228	HARS	45 C	1202.5	1203.5	2.0	365	60		
	5200	BERN	41 F	1202.5	1204.3	17.0	56.0			
	3100	CRIM	3 S	1202.8	1204.4	3.0	44	14		
	810	KRAK	42 SER	1202.8	1203.8	4.0	54.0			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
15	2940	GORK			1203.0	1204.1		42.0			
	2950	GORK	45	C	1203.0	1203.3	2.8	19.0			
	9100	GORK	2	S/F	1203.0	1204.4	2.7	22.0	10.0		
	100	GORK	45	C	1203.0E	1203.5U	2.4D	300.0D			
	100	GORK			1203.0E	1204.2		300.0D			
	2950	GORK			1203.0	1204.4		46.0			
	6100	KISV	4	S/F	1203.0	1204.3	3.0	27			
	2800	OTTA	4	S/F	1203.0	1203.5	3.0	44.0	15.0		
	2650	DWIN	2	S/F	1203.0	1204	3.0	30	15		
	9400	HUAN	1	S	1203.7	1204.2	1.6	19.6	8.0		0
	2800	OTTA	8	S	1204.0	1204.2	.6	2.4	1.2		
	2800	OTTA	21	GRF	1212.0	1250	70.0	4.8	3.2		
	6100	KISV	3	S	1212.0	1213.7	4.0	11			
	2800	OTTA	3	S	1212.2	1213.8	3.5	44.0	15.0		
	2950	GORK	1	S	1212.8	1213.7	2.8	16.0	8.0		
	9100	GORK	1	S	1213.3	1213.8	2.5	6.0	3.0		
	3100	CRIM	1	S	1214.5	1215.8	3.0	15	3		
	6100	KISV	1	S	1217.0	1217.6	2.0	6			
	9100	GORK	1	S	1223.2	1223.5	.8	8.0	4.0		
	2800	OTTA	3	S	1234.7	1235.3	1.4	10.8	4.0		
	536	ONDR	42	SER	1258.5	1301.5	7.0	46.0			
	930	BORD	41	F	1258.7	1259.3	.8	24	2		
	2800	OTTA	1	S	1259.0	1259.3	1.0	3.2	1.8		
	930	BORD	41	F	1407.2	1407.4	.5	14	2		
	930	BORD	42	SER	1437.5	1437.6	4.0	32	2		
	2800	OTTA	21	GRF	1450.0	1614	170.0	10.0	4.0		
	8400	BERN	41	F	1515.0	1520.5	28.0	94.0			
	11800	BERN	41	F	1515.0	1520.5	28.0	56.0			
	5200	BERN	41	F	1515.7	1520.6	28.0	133.0			
	3200	BERN	41	F	1515.7	1520.6	28.0	100.0			
	2800	OTTA	3	S	1518.5	1520.5	3.0	122.0	22.0		
	930	BORD	46	C	1520.0	1520.5	13.0	158	5		
	2650	DWIN	45	C	1520.0	1521	10.0	90	20		
	1415	ATHN	4	S/F	1520.3	1520.6	26.2D	75			
	4995	ATHN	4	S/F	1520.3	1520.6	31.5D	139			
	2695	ATHN	4	S/F	1520.3	1520.6	30.2D	84			
	15400	SGMR	8	S	1520.5	1520.6	.3	29			
	8800	ATHN	4	S/F	1520.5	1520.6	25.8	42			
	228	HARS	1	S	1521.0	1521.6	1.5	700	240		
	2800	OTTA	30	PBI	1521.5	1521.5	16.0	17.6	5.9		
	2800	OTTA	8	S	1523.5	1523.7	.5	7.4	3.4		
	2800	OTTA	4	S/F	1526.0	1527.8	4.0	27.0	7.0		
	930	BORD	8	S	1651.5	1651.5	.1	12	1		
	5200	BERN	3	S	1703.5	1707.6	5.0	50.0			ONLY PAPER REC
	3200	BERN	3	S	1703.5	1707.6	5.0				ONLY PAPER REC
	930	BORD	46	C	1706.0	1707.2	6.0	30	5		
	4995	PALE	8	S	1707.5	1707.8	.3	51			
	1415	PALE	8	S	1707.5	1707.8	.5	39			
	245	PALE	8	S	1707.5	1707.6	.3	490			
	2695	PALE	8	S	1707.6	1707.8	.4	45			
	228	HARS	45	C	1707.6	1708.0	1.0	440	165		
	2800	OTTA			1708.0		4.0D	5.8			
	606	PALE	8	S	1708.6	1708.8	.4	350			
	2800	OTTA	45	C	1821.0	1821.4	4.5	12.8			
	606	PALE	8	S	1821.1	1821.1	.7	150			
	2800	OTTA	21	GRF	1910.0	2144	355.0	14.8	7.4		
	2800	OTTA	3	S	1919.0	1919.5	2.0	14.8	4.0		
	245	PALE	47	GB	1919.1	1919.1	.4	990			
	1415	PALE	8	S	1919.3	1919.3	.2	13			
	2695	PALE	8	S	1919.3	1919.3	.2	18			
	2800	OTTA	1	S	1926.8	1927.5	1.5	4.4	2.0		
	2800	OTTA	1	S	1943.0	1944	5.0	3.8	1.8		
	8800	PALE	47	GB	1950.3	1956.5	7.0	670			
	8800	PALE	47	GB	2004.5	2015.5	18.6	2100			
	1415	PALE	8	S	2016.0	2016.3	.5	32			
	1000	TYKW			2130.0	2240.8		7			
	1000	TYKW			2130.0	2222.4		15			
	3750	TYKW	21	GRF	2130.0	2142	110.0	8	4		
	2000	TYKW	21	GRF	2130.0	2143	110.0	6	3		
	1000	TYKW			2130.0	2208.6		22			
	1000	TYKW	45	C	2130.0	2143.2	110.0	31	4		
	2800	OTTA	1	S	2130.0	2131	2.0	3.4	1.6		
	3750	TYKW	5	S	2130.5	2131.2	1.5	6	2		
	2000	TYKW	5	S	2130.5	2131.2	1.5	2	.5		
	606	PALE	47	GB	2141.5	2144.0	7.1	38			
	410	PALE	4	S/F	2141.6	2143.3	2.5	25			
	1415	PALE	8	S	2143.0	2143.3	.5	16			
	3750	TYKW	5	S	2232.0	2234.7	8.0	4	1.5		
	9400	TYKW	5	S	2240.3	2240.7	1.5U	23	8	U	RAIN
	2695	PENT	1	S	2240.3	2240.5	2.0	9.4	4.0		
	3750	TYKW	45	C	2240.4	2240.7	1.0	17	6		
	2000	TYKW	5	S	2240.4	2240.7	1.5	6	2		
	3750	TYKW	5	S	2251.0	2252	12.0	5	1.5		
	2695	PENT	1	S	2251.0	2252	7.0	6.0	3.0		
	3750	TYKW	21	GRF	2324.0	2343	103.0	8	4.5		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
15	2000	TYKW	21	GRF	2325.0	0034	100.0	5	2		
	9400	TYKW	21	GRF	2325.0	2343	100.0	14	7		RAIN
	2930	VORO	47	GB	2325.0	2353	55.0	710			
	4995	LEAR	47	GB	2329.5	2352.8	55.1D	1700			
	2695	LEAR	47	GB	2329.5	2343.0	53.1D	2800			
	8800	LEAR	47	GB	2329.5	2346.6	55.0D	2000			
	1415	LEAR	47	GB	2329.6	2352.6	53.6D	580			
	606	LEAR	47	GB	2329.6	2349.6	45.3D	310			
	15400	LEAR	47	GB	2329.8	2346.3	54.8D	1500			
	3750	TYKW	45	C	2331.3	2331.6	2.0	2	.5		
	2000	TYKW	5	S	2332.3	2332.5	.7	2.5	1		
	410	LEAR	4	S/F	2336.3	2342.6	32.5D	350			
	245	LEAR	47	GB	2339.3	2343.8	20.3	490			
16	200	GORK	44	NS	0346.0E		520.0D		5.0		
	100	GORK	44	NS	0349.0E		300.0D		10.0		
	127	TORN	44	NS	0600.0E	0803.8	600.0D	70	4		V0
	260	ONDR	44	NS	0611.0E		479.0D	40.0	3.0		
	208	VORO	44	NS	2210.0E		350.0D		11		
	245	LEAR	43	NS	2300.0	0219.3	635.0D	100			
	3750	TYKW	45	C	0031.0	0034.3	28.0	9	2.5		
	8800	LEAR	4	S/F	0032.3	0032.3	175.4	15			
	9400	TYKW	5	S	0040.0E	0045	20.0D	7	4 D		
	15400	PALE	8	S	0050.1	0051.5	1.5	36			
	1000	TYKW	5	S	0051.0	0057.5	15.0	2	1		
	15400	LEAR	4	S/F	0102.3	0114.6	27.0	37			
	606	LEAR	47	GB	0106.8	0108.8	2.0D	13			
	3750	TYKW	28	PRE	0110.0	0113	3.0	5	2.5		
	2930	VORO	3	S	0110.0	0115	10.0	55			
	2840	PEKG	42	SER	0110.0	0122.5	35.0	67.0			
	2695	PENT	21	GRF	0110.0	0120	30.0	7.0	3.5		
	9400	TYKW	28	PRE	0111.0	0113	2.0	3	2		
	3659	YUNN			0112.0	0114	6.0				RIF 29.9
	9375	YUNN	7	C	0113.0	0114.5	8.0				RIF 13.4
	9400	TYKW	5	S	0113.0	0114.5	3.0	48	19		
	2000	TYKW	5	S	0113.0	0114.6	4.0	30	10		
	3750	TYKW	5	S	0113.0	0114.6	6.0	72	20		
	1000	TYKW	5	S	0113.0	0114.6	5.0	16	4		
	2695	MANI	4	S/F	0113.0	0115.1	3.6D	69			
	9395	PEKG	3	S	0113.0	0119	28.0	15.0	10.2		
	2695	PENT	3	S	0113.0	0114.7	5.0	42.0	12.0		
	4995	MANI	4	S/F	0113.3	0115.1	4.3D	130			
	500	HIRA	3	S	0113.4	0114.1	2.0	10	4		SL
	1415	MANI	4	S/F	0113.6	0115.5	2.7D	15			
	4995	PALE	47	GB	0113.6	0120.0	9.9	240			
	5730	IRKU	20	GRF	0113.7	0114.7	3.0	50	30		L
	9395	PEKG	3	S	0113.8	0114.7	31.0	38.2	12.4		
	8800	PALE	47	GB	0113.8	0114.5	1.0	51			
	8800	MANI	4	S/F	0114.0	0115.1	2.8	71			
	1415	PALE	8	S	0114.0	0114.5	.6	17			
	2695	PALE	47	GB	0114.6	0114.6	3.6	45			
	606	MANI	8	S	0114.0	0115.1	1.6D	02			
	4995	LEAR	8	S	0114.6	0114.6	1.2	77			
	2695	LEAR	8	S	0114.6	0114.6	.7	40			
	410	LEAR	47	GB	0114.6	0114.8	.2D	16			
	8800	LEAR	8	S	0114.6	0114.6	.7	56			
	9400	TYKW	29	PBI	0116.0		75.0	17	6		
	2000	TYKW	29	PBI	0117.0		40.0	5	2		
	3750	TYKW	29	PBI	0119.0		40.0	13	6		
	500	HIRA	46	C	0121.7	0124.0	4.0	35	10		ML
	1000	TYKW	45	C	0122.5	0124.3	2.0	2	.5		
	3750	TYKW	5	S	0207.0	0213.9	20.0	16	2.5		
	2930	VORO	3	S	0255.0	0257	5.0	63			
	1000	TYKW	5	S	0255.5	0256.0	2.5	3	1		
	3750	TYKW	5	S	0255.5	0256.0	2.5	52	14		
	9400	TYKW	5	S	0255.5	0256.0	1.5	17	5		
	2000	TYKW	5	S	0255.5	0256.3	2.5	40	13		
	2695	LEAR	8	S	0255.6	0256.1	.9	49			
	4995	LEAR	8	S	0255.6	0256.1	.7	38			
	5730	IRKU	1	S	0255.7	0256.2	1.5	40	15		R
	9395	PEKG	1	S	0255.7	0256.3	2.3	9.2	5.2		
	2840	PEKG	5	S	0255.7	0256.3	4.3	52.4	11.0		
	1415	LEAR	8	S	0255.8	0256.1	.5	20			
	15400	LEAR	8	S	0255.8	0256.1	.3	10			
	8800	LEAR	8	S	0255.8	0256.0	.3	19			
	9400	TYKW	30	PBI	0257.0		45.0	2	1		
	2000	TYKW	29	PBI	0258.0		7.0	3	1		
	3750	TYKW	30	PBI	0258.6		50.0	2	1		
	1000	TYKW	45	C	0317.0	0317.4	1.5	4.5	1.5		
	9400	TYKW	5	S	0317.0	0317.5	2.0	16	4.5		
	3750	TYKW	5	S	0317.0	0317.5	2.0	12	4		
	2840	PEKG	1	S	0317.0	0317.6	2.0	6.4	3.0		
	9395	PEKG	1	S	0317.0	0317.7	2.0	8.4	4.1		
	4995	LEAR	8	S	0317.3	0317.3	.3	15			
	15400	LEAR	8	S	0317.3	0317.3	.3	17			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
16	2695	LEAR	8	S	0317.3	0317.3	.3	05			
	8800	LEAR	8	S	0317.3	0317.3	.3	18			
	3750	TYKW	5	S	0322.0	0330.5	20.0	3.5	1.5		
	9400	TYKW	21	GRF	0411.0	0432	100.0	6	2		
	9400	TYKW	45	C	0411.5	0412.2	1.5	5	1.5		
	3750	TYKW	21	GRF	0414.0	0444	85.0	7	4		
	1000	TYKW	5	S	0414.0	0416.2	5.0	4	1.5		
	3750	TYKW	5	S	0414.0	0416.6	4.0	9	3		
	2000	TYKW	5	S	0414.0	0416.1	4.0	10	4.5		
	2950	GORK	1	S	0415.3	0416.4	1.5	5.0	2.5		
	2000	TYKW	30	PBI	0418.0		80.0	3	1.5		
	3750	TYKW	29	PBI	0418.0		12.0	3	1.5		
	9400	TYKW	5	S	0423.5	0423.8	1.5	4	1.5		
	2000	TYKW	5	S	0439.0	0441.5	5.0	4.5	2.5		
	2000	TYKW	29	PBI	0444.0		35.0	2	1		
	3750	TYKW	45	C	0500.0	0503.8	8.0	11	2.5		
	9400	TYKW	45	C	0501.0	0502.4	4.0	12	6		
	6100	KISV	45	C	0501.0	0503.9	5.0	7			
	6100	KISV			0501.0	0502.9		5			
	8800	ATHN	4	S/F	0501.6	0503.8	3.0	19			
	9100	GORK	2	S/F	0501.7	0502.9	4.4	24.0			
	2695	ATHN	4	S/F	0501.8	0502.6	2.8D	04			
	4995	ATHN	4	S/F	0501.8	0503.8	5.0D	13			
	1000	TYKW	45	C	0502.0	0502.3	1.0	16	6		
	2950	GORK	1	S	0502.0	0502.7	6.1	5.0	2.5		
	950	GORK	2	S/F	0502.0	0502.3	.7	13.0			
	9400	TYKW	29	PBI	0505.6		25.0	4	2		
	2000	TYKW	21	GRF	0609.0	0645	80.0	3	1.5		
	2000	TYKW	45	C	0609.5	0611.3	3.5	4.5	1.5		
	1000	TYKW	45	C	0610.7	0611.8	1.5	9	1.5		
	3750	TYKW	20	GRF	0615.0	0650	90.0	4	2		
	9400	TYKW	20	GRF	0620.0	0650	70.0	3	1.5		
	9375	YUNN	1	S	0736.0	0737	3.0				RIF 5.8
	3659	YUNN	40	F	0811.0	0813	14.0				RIF 6.6
	8800	ATHN	4	S/F	0842.6	0846.3	83.9	25			
	2950	GORK	21	GRF	0842.7	0909.0	125.0	10.0	5.0		
	9100	GORK	22	GRF	0842.9	0846.3	95.0	24.0			
	3100	CRIM	3	S	0843.0	0846.0	8.0	20	7		
	3100	CRIM	29	PBI	0843.0	0851.0	105.0	11	4		
	6100	KISV	4	S/F	0843.0	0846.2	6.0	16			
	3200	BERN	3	S	0843.0	0846.2	75.0				ONLY PAPER REC
	5200	BERN	3	S	0843.0	0846.2	75.0	27.0			ONLY PAPER REC
	3659	YUNN			0843.0	0846	12.0				RIF 9.5
	4995	ATHN	4	S/F	0843.3	0846.3	74.7D	37			
	1415	ATHN	4	S/F	0843.6	0846.1	87.7D	20			
	9375	YUNN	21	GRF	0844.0	0846.5	10.0				RIF 3.
	950	GORK	20	GRF	0844.2	0847.5	13.2	9.0	4.5		
	2950	GORK	45	C	0844.9	0846.1	5.8	14.0			
	4995	LEAR	4	S/F	0845.3	0846.3	4.3	24			
	8800	LEAR	47	GB	0845.3	0846.3	475.2	22			
	2695	LEAR	4	S/F	0845.5	0847.8	4.0	23			
	1415	LEAR	8	S	0845.8	0846.3	.5	15			
	15000	KISV	3	S	0846.0	0851	14.0	20			
	2950	GORK			0844.9	0847.8		13.0			
	810	KRAK	2	S	0923.3	0923.4		.8	11.0		
	430	KRAK	8	S	0923.5	0923.5	.2	57.0			
	100	GORK	8	S	0939.5	0939.7	.7	280.0D			
	430	KRAK	42	SER	1049.3	1100.0	40.0	40.0			
	2950	GORK	20	GRF	1124.0	1129.0	16.0	3.0	1.5		
	9100	GORK	20	GRF	1124.7	1125.2	16.6	6.0	3.0		
	810	KRAK	42	SER	1134.3	1134.0	5.0	17.0			
	810	KRAK	8	S	1254.3	1254.7	.3	7.0			
	2800	OTTA	20	GRF	1310.0	1415	160.0	8.0	4.0		
	930	BORD	8	S	1514.9	1514.9	.1	35	1		
	930	BORD	46	C	1535.0	1535.3	1.0	125	3		
	2800	OTTA	20	GRF	1600.0	1654	75.0	4.0	2.0		
	2800	OTTA	23	GRF	1800.0	2010	270.0	12.6	6.3		
	9400	HUAN	20	GRF	1804.8	1835.0	63.0	10.2	3.5		0
	2800	OTTA	1	S	2051.0	2052.5	3.0	3.4	1.7		
	9400	HUAN	2	S/F	2058.4	2059.8	2.3	12.0	8.3		0
	2000	TYKW	5	S	2154.3	2154.6	1.0	3	1		
	3750	TYKW	28	PRE	2154.3	2154.7	44.7	6	1.5		
	2800	OTTA	8	S	2154.4	2154.5	.7	4.0			
	2695	PENT	21	GRF	2239.0	2320	180.0D	14.6			
	3750	TYKW	47	GB	2239.0	2240.7	2.5	3700	200		
	9400	TYKW	47	GB	2239.0	2240.7	2.5	700	110		
	2000	TYKW	47	GB	2239.0	2241.0	5.0	990	150		
	2695	MANI	47	GB	2239.0	2240.8	7.6D	900			
	1415	MANI	4	S/F	2239.0	2242.6	9.5D	350			
	2695	PENT	47	GB	2239.2	2240.7	6.0	1020.0	102.0		
	4995	MANI	47	GB	2239.3	2240.8	6.3D	690			
	8800	MANI	47	GB	2239.3	2241.0	4.8	500			
	17000	NOBE	21	GRF	2239.4	2248.6	29.0	24			0
	1000	TYKW	45	C	2239.8	2242.1	4.2	160	45		
	500	HIRA	45	C	2240.0	2242.0	2.5	15	8		WR

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
16	17000	NOBE	2	S/F	2240.4	2240.6	.5	30			0
	3750	TYKW	30	PBI	2241.5		230.0	20	10		
	9400	TYKW	30	PBI	2241.5		230.0	30	10		
	35000	NAGO	20	GRF	2242.0	2246	31.0	18			
	2000	TYKW	29	PBI	2244.0		230.0	12	7		
	1000	TYKW	29	PBI	2244.0		230.0	3	1.5		
	9400	TYKW	5	S	2356.0	2356.3	1.0	6	2		
17	200	GORK	44	NS	0400.0E		497.0D	5.0			
	204	IZMI	43	NS	0600.0		360.0D	46			
	260	ONDR	44	NS	0624.0E		457.0D	54.0	4.0		
	245	SGMR	43	NS	1328.5	1417.3	48.8D	180			
	200	HIRA	44	NS	2001.0E	0116	780.0D	25 U	5 U		WR
	208	VORO	44	NS	2200.0E		360.0D		11		
	245	LEAR	43	NS	2254.0	0345.3	658.0D	200			
	3750	TYKW	21	GRF	0038.0	0110	80.0	4	2		
	3750	TYKW	5	S	0039.0	0040.5	5.0	2	1		
	410	LEAR	8	S	0134.0	0135.5	1.6	46			
	1000	TYKW	32	ABS	0305.0	0320	60.0	-2	-1		
	2000	TYKW	32	ABS	0309.0	0324	59.0	-3	-1		
	2930	VORO	3	S	0320.0	0325	10.0	82			
	3659	YUNN	29	PBI	0323.0	0325	6.0				RIF 39.
	5730	IRKU	21	GRF	0323.7	0324.6	2.0	85	20		L
	9375	YUNN	29	PBI	0324.0	0326	11.0				RIF 15.
	3750	TYKW	5	S	0324.0	0325.6	5.0	90	20		
	2000	TYKW	5	S	0324.0	0325.7	6.0	25	6		
	4995	MANI	4	S/F	0324.5	0325.6	4.1D	110			
	2695	MANI	4	S/F	0324.8	0325.8	3.2D	52			
	8800	MANI	4	S/F	0325.0	0325.6	2.8	75			
	4995	LEAR	4	S/F	0325.6	0325.6	2.1	96			
	9400	TYKW	5	S	0325.0	0325.6	3.0	55	14		
	2840	PEKG	5	S	0325.0E	0325.8	4.0D	60.0			
	8800	LEAR	8	S	0325.1	0325.6	1.5	81			
	15400	LEAR	8	S	0325.1	0325.6	.5	27			
	2695	LEAR	8	S	0325.1	0325.6	1.2	53			
	1000	TYKW	5	S	0325.5	0325.8	.6	1	.3		
	9400	TYKW	30	PBI	0328.0		40.0	8	4		
	3750	TYKW	30	PBI	0329.0		38.0	5	2.5		
	1000	TYKW	5	S	0336.3	0336.7	1.0	1.5	.5		
	3659	YUNN	7	C	0337.0	0343	13.0				RIF 10.
	3750	TYKW	45	C	0339.0	0342.8	17.0	7	2		
	9400	TYKW	45	C	0339.0	0346.5	25.0	57	8		
	1000	TYKW	45	C	0339.0	0345.8	10.0	36	2		
	2840	PEKG	20	GRF	0339.0	0343	16.0	4.2			
	9375	YUNN	7	C	0340.0	0347	10.0				RIF 15.
	8800	LEAR	47	GB	0340.1	0346.5	8.2	63			
	4995	LEAR	47	GB	0340.8	0342.8	3.5	17			
	2000	TYKW	42	SER	0341.0	0345.3	7.0	18	1		
	15400	LEAR	47	GB	0343.1	0346.5	5.0	52			
	17000	NOBE	1	S	0345.3	0345.5	1.7	30			0
	9375	YUNN	20	GRF	0351.0	0353	11.0				RIF 5.
	8800	LEAR	4	S/F	0351.8	0353.0	2.2	25			
	4995	LEAR	8	S	0352.6	0353.0	.2	13			
	100	HIRA	46	C	0407.3	0410.5	4.7	1200	310		WR
	3659	YUNN	30	PBI	0408.0	0410	7.0				RIF 11.
	2000	TYKW	21	GRF	0408.0	0435	220.0	8	3		
	2000	TYKW	45	C	0408.6	0410.1	9.0	41	7		
	2840	PEKG	45	C	0408.0	0409.7	6.0	2.3D			
	3750	TYKW	45	C	0408.5	0410.0	7.0	13	3		
	9400	TYKW	21	GRF	0409.0	0434	70.0	4	2		
	1000	TYKW	45	C	0409.0	0410.2	6.0	26	6		
	200	HIRA	46	C	0409.0	0409.6	3.0	180	35		WR
	200	GORK	4	S/F	0409.0	0409.7	2.6	70.0D			
	100	GORK	8	S	0409.0	0410.0U	2.3	200.0D			
	950	GORK	4	S/F	0409.2	0410.2	6.7	1.8			
	500	HIRA	4	S/F	0409.4	0409.8	2.0	27	16		SR
	9400	TYKW	5	S	0409.5	0410.3	2.5	2.5	1		
	410	LEAR	8	S	0409.6	0409.8	.2	33			
	606	LEAR	8	S	0409.8	0410.0	.7	28			
	3750	TYKW	21	GRF	0418.0	0500	190.0	5	2		
	3750	TYKW	5	S	0418.6	0418.9	.5	3	1		
	1000	TYKW	8	S	0418.7	0418.9	.3	24	5		
	2000	TYKW	5	S	0418.7	0418.9	1.0	2	.5		
	3750	TYKW	20	GRF	0540.0	0635	100.0	7	2.5		
	2000	TYKW	5	S	0541.0	0545	10.0	1.5	.7		
	9400	TYKW	20	GRF	0550.0	0640	90.0	4	2		
	2000	TYKW	20	GRF	0555.0	0635	105.0	5	2.5		
	410	LEAR	8	S	0611.8	0612.1	.3	11			
	606	LEAR	8	S	0611.8	0612.1	.3	25			
	245	LEAR	8	S	0612.6	0612.8	.2	34			
	410	LEAR	8	S	0653.8	0654.8	1.0	02			
	245	LEAR	8	S	0654.1	0654.6	.7	15			
	606	LEAR	8	S	0654.3	0654.6	.5	07			
	430	KRAK	8	S	0714.6	0714.0	.1	530.0			
	810	KRAK	8	S	0714.5	0714.5	.3	80.0			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
17	245	LEAR	8 S	0722.8	0722.8	.3	53			
	3100	CRIM	26 FAL	0748.0	0952.0		11			
	3659	YUNN	22 GRF	0818.0	0823	25.0				RIF 7.
	9375	YUNN	40 F	0827.0	0833	17.0				RIF 13.
	8800	ATHN	4 S/F	0858.3	0900.0	4.8	06			
	4995	ATHN	4 S/F	0858.6	0859.8	3.7D	04			
	245	LEAR	8 S	0904.6	0904.6	.2	81			
	245	LEAR	8 S	0917.6	0917.8	.5	58			
	410	LEAR	8 S	0918.8	0919.0	.3	18			
	430	KRAK	8 S	0920.0	0920.0	.1	170.0			
	410	LEAR	8 S	0924.8	0925.0	.3	99			
	245	LEAR	8 S	0924.8	0925.0	.3	54			
	8800	ATHN	4 S/F	0930.6	0932.6	6.2	15			
	9100	GORK	2 S/F	0930.7	0931.6	5.2	11.0	5.0		
	4995	ATHN	4 S/F	0930.8	0931.6	8.2D	04			
	430	KRAK	8 S	0946.5	0946.8	.5	35.0			
	9100	GORK	1 S	1038.2	1040.8	6.0	6.8	3.0		
	33	UPIC	42 SER	1048.0	1156.3D	143.6				
	29	UPIC	42 SER	1048.5	1246.2U	140.7				
	2800	OTTA	21 GRF	1210.0	1240	275.0	40.0	16.0		
	930	BORD	45 C	1214.0	1248.6	100.0	138	17		
	536	ONDR	48 C	1216.0		98.0	55.0D	9.0		
	2800	OTTA	2 S/F	1216.9	1218	4.5	9.8	3.3		
	9400	HUAN	21 GRF	1222.3	1322.5	152.0	23.8	10.7		L
	127	TORN	27 RF	1225.0	1227.5	67.0	230	20		
	260	ONDR	48 C	1230.0	1240.5	50.0	155.0	27.0		
	606	SGMR	47 GB	1231.0	1244.3	37.1D	90			
	245	SGMR	47 GB	1231.0	1241.3	29.0D	270			
	410	SGMR	47 GB	1231.5	1248.6	28.5D	73			
	228	HARS	47 GB	1232.0	1241.0	28.0	225	45		
	808	ONDR	48 C	1234.5	1248.8	80.0	92.0	11.0		
	430	KRAK	45 C	1235.0U	1305 U	40.0U	230.0	70.0		
	810	KRAK	45 C	1235.6	1249.0	38.0D	7.7	28.0		
	2695	SGMR	4 S/F	1235.0	1249.8	25.0	26			
	8800	ATHN	4 S/F	1235.5	1304.8	98.1	32			
	1415	SGMR	4 S/F	1236.8	1250.0	23.2D	45			
	4995	ATHN	4 S/F	1239.0	1408.3	94.6D	44			
	1415	ATHN	4 S/F	1243.3	1258.3	79.2D	34			
	2695	ATHN	4 S/F	1243.3	1258.6	85.2D	24			
	11800	BERN	21 GRF	1309.0	1424.3	190.0	71.0			
	5200	BERN	21 GRF	1309.0	1424.3	190.0	187.0			
	8400	BERN	21 GRF	1309.0	1424.3	190.0	129.0			
	3200	BERN	21 GRF	1309.0	1424.3	190.0	145.0			
	606	SGMR	4 S/F	1328.0	1334.8	13.3D	73			
	2695	SGMR	8 S	1328.6	1328.8	.2	93			
	1415	SGMR	4 S/F	1329.0	1331.8	5.1D	20			
	410	SGMR	4 S/F	1330.5	1332.1	10.1D	16			
	2695	ATHN	4 S/F	1421.1	1422.3	7.5D	130			
	4995	ATHN	4 S/F	1421.3	1422.5	7.3D	170			
	8800	ATHN	4 S/F	1421.3	1422.3	4.5	110			
	1415	ATHN	4 S/F	1421.6	1422.3	6.2D	59			
	606	SGMR	4 S/F	1422.0	1424.6	7.0D	76			
	19600	BERN	21 GRF	1422.8	1424.3	5.5	42.0			
	410	SGMR	4 S/F	1423.0	1423.5	4.5D	190			
	10715	DWIN	3 S	1423.0	1424	4.0	110	50		
	2650	DWIN	3 S	1423.0	1424	5.0	135	50		
	930	BORD	3 S	1423.0	1425.3	7.0	30	10		
	2800	OTTA	3 S	1423.0	1424.3	7.0	160.0	32.0		
	1415	SGMR	4 S/F	1423.1	1424.3	4.9D	77			
	2695	SGMR	4 S/F	1423.1	1424.3	6.2D	160			
	4995	SGMR	4 S/F	1423.3	1424.3	4.8D	180			
	15400	SGMR	4 S/F	1423.3	1424.3	4.3D	65			
	8800	SGMR	4 S/F	1423.5	1424.5	3.6D	150			
	9400	HUAN	3 S	1423.5	1424.3	3.2	127.3	50.9		L
	245	SGMR	47 GB	1425.1	1426.3	4.9	1100			
	127	TORN	45 C	1426.1	1432.2	6.5	260 D	30 D		
	228	HARS	45 C	1426.5	1427.5	4.0	400	75		
	9400	HUAN	2 S/F	1648.5	1648.9	2.7	18.7	8.5		0
	9400	HUAN	21 GRF	1702.6	1709.5	42.0	5.1	3.8		0
	9400	HUAN	2 S/F	1706.2	1706.7	1.8	25.4	11.5		0
	9400	HUAN	2 S/F	1711.0	1711.3	1.4	15.3	9.9		R
	9400	HUAN	1 S	1713.8	1714.3	1.6	13.6	5.8		0
	2800	OTTA	24 R	1715.0	1720	5.0	5.0	2.5		
	2800	OTTA	27A RF	1715.0		145.0	5.0	4.2		
	2800	OTTA	24P R	1720.0		100.0	5.0			
	9400	HUAN	20 GRF	1814.0	1830.7	26.6	8.5	2.1		0
	2800	OTTA	1 S	1829.0	1830.8	3.0	2.4	1.2		
	2800	OTTA	26 FAL	1900.0	1940	40.0	-5.0	-2.5		
	1415	SGMR	4 S/F	2017.0	2030.0	24.0	31			
	2695	SGMR	4 S/F	2024.5	2032.6	15.3D	28			
	4995	SGMR	4 S/F	2031.6	2038.5	13.4D	16			
	2800	OTTA	20 GRF	2050.0	2130	100.0	8.2	4.1		
	3750	TYKW	20 GRF	2115.0	2130	75.0	6	3.5		
	2000	TYKW	20 GRF	2115.0	2125	75.0	5	2.5		
	9400	TYKW	20 GRF	2120.0	2130	70.0	4	2		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
17	2930	VORO	47	GB	2235.0	2240	25.0	916			
	3750	TYKW	21	GRF	2243.0	2330	130.0	6	3		
	2000	TYKW	21	GRF	2245.0U	2315	115.0U	4	2 U		
	3750	TYKW	45	C	2247.5	2248.7	2.5	28	4		
	2695	PENT	3	S	2248.0	2249	2.5	30.0			
	1000	TYKW	45	C	2253.0	2302.4	27.0	32	5		
	2000	TYKW	45	C	2300.0	2303	13.0	11	6		
	9400	TYKW	20	GRF	2300.0	2330	120.0	11	4.5		
	2695	PENT	20	GRF	2300.6	2303	30.0	10.2	5.0		
	3750	TYKW	45	C	2301.0	2310.5	26.0	10	4		
18	200	GORK	44	NS	0353.0E		277.0D		25.0		
	204	IZMI	44	NS	0600.0E		360.0D	55			
	260	ONDR	44	NS	0630.0E		460.0D	44.0	4.0		
	410	LEAR	43	NS	0638.1	0638.8	193.9D	79			
	127	TORN	43	NS	0730.0	1038.4	510.0D	90	4		V1
	208	VORO	44	NS	2200.0E		360.0D		15		
	3750	TYKW	45	C	0012.5	0013.7	3.5	7	3.5		
	2000	TYKW	5	S	0013.0	0013.7	5.0	2	.7		
	3750	TYKW	29	PBI	0016.0		25.0	3	1.5		
	1000	TYKW	5	S	0101.0	0102.8	4.0	3	.5		
	3750	TYKW	28	PRE	0105.0	0130	25.0	4	2		
	2000	TYKW	28	PRE	0105.0	0130	25.0	3	1.5		
	9400	TYKW	28	PRE	0110.0	0125	20.0	4	2		
	3659	YUNN	42	SER	0124.0	0142	20.0				RIF 25.
	2840	PEKG	45	C	0126.0	0135.2	13.0D	28.3			
	2930	VORO	42	SER	0130.0	0143	21.0	92			
	2000	TYKW	45	C	0130.0	0135.1	9.0	26	10		
	9400	TYKW	45	C	0130.0	0133.6	8.0	135	60		
	3750	TYKW	45	C	0130.0	0133.6	8.0	42	23		
	1000	TYKW	45	C	0131.0	0131.9	12.0	10	1.5		
	9375	YUNN	7	C	0131.0	0133	8.0				RIF 35.
	9395	PEKG	45	C	0131.0	0133.7	16.0	133.0	48.0		
	9395	PEKG			0131.0	0136.4		125.0			
	4995	MANI	47	GB	0131.1	0133.6	14.5D	139			
	1415	MANI	47	GB	0131.1	0133.3	8.9D	17			
	8800	LEAR	47	GB	0131.3	0133.5	9.8	160			
	4995	LEAR	47	GB	0131.5	0142.6	12.1	77			
	5730	IRKU	45	C	0131.5	0132.7	7.0	75	45		R
	5730	IRKU			0131.5	0136.4		60			R
	5730	IRKU			0131.5	0133.6		85			R
	17000	NOBE	7	C	0131.7	0133.5	5.8	95			R
	15400	LEAR	47	GB	0131.8	0136.1	9.3	110			
	8800	MANI	47	GB	0132.0	0132.8	8.5	110			
	2695	MANI	47	GB	0132.0	0135.3	12.1D	98			
	35000	NAGO	20	GRF	0132.0	0136	50.0	41			
	2695	LEAR	47	GB	0132.1	0135.1	11.7	75			
	1415	LEAR	47	GB	0133.1	0133.6	.2	13			
	17000	NOBE	29	PBI	0137.5	0137.5	26.0	36			0
	3750	TYKW	30	PBI	0138.0		245.0	15	7		
	9400	TYKW	30	PBI	0138.0		170.0	33	7		
	2840	PEKG	4	S/F	0138.5	0142.3	17.5	124.0	60.0		
	3750	TYKW	28	PRE	0139.0	0140	3.0	3	1.5		
	2000	TYKW	30	PBI	0139.0		240.0	9	5		
	2000	TYKW	45	C	0141.5	0142.3	10.0	12	3		
	2695	PENT	40	F	0141.8	0142.3	2.0	67.0			
	3750	TYKW	45	C	0142.0	0142.2	4.0	54	13		
	9400	TYKW	45	C	0142.0	0142.1	1.0	6	1.5		
	606	LEAR	8	S	0142.1	0144.0	.2	11			
	5730	IRKU	45	C	0142.1	0142.7	2.0	45	13		R
	5730	IRKU			0142.1	0143.2		25			R
	3750	TYKW	30	PBI	0146.0		50.0	6	3		
	9395	PEKG	29	PBI	0147.6	0149	43.0D	19.0			
	3750	TYKW	5	S	0157.0	0206	25.0	4	1.5		
	9400	TYKW	5	S	0246.0	0247.2	5.0	7	2		
	3659	YUNN	20	GRF	0250.0	0255	9.0				RIF 4.
	3750	TYKW	5	S	0254.0	0255.3	2.0D	2	.7D		
	9395	PEKG	5	S	0303.0	0304.4	10.0	26.0	7.0		
	9400	TYKW	5	S	0303.5	0304.0U	.5D	20 D	5 D		
	17000	NOBE	1	S	0303.7	0304.1	1.7	36			R
	15400	LEAR	8	S	0303.8	0304.0	2.0	52			
	8800	LEAR	4	S/F	0303.8	0304.3	2.2	36			
	9375	YUNN	30	PBI	0304.0	0305	4.0				RIF 9.
	3750	TYKW	45	C	0313.0	0314	11.0	2	1		
	9400	TYKW	21	GRF	0320.0	0348	50.0	6	2		
	2000	TYKW	20	GRF	0320.0	0340	40.0	2	1		
	3750	TYKW	20	GRF	0330.0	0345	40.0	3	1.5		
	9400	TYKW	5	S	0343.6	0343.8	.5	2.5	1		
	2950	GORK	20	GRF	0427.7	0836.0	248.0E	12.0	6.0		
	3659	YUNN	20	GRF	0438.0	0510	59.0				RIF 7.5
	3750	TYKW	5	S	0439.0	0440.3	3.0	4	1.5		
	9400	TYKW	5	S	0439.0	0440.3	3.0	6	1.5		
	9100	GORK	1	S	0439.4	0440.8	1.9	7.0	3.5		
	3750	TYKW	29	PBI	0442.0		9.0	1	.5		
	2840	PEKG	22	GRF	0451.0	0510.4	43.0	7.2	3.4		

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18	3750	TYKW	21	GRF	0452.0	0510.2	45.0	8	3		
	3750	TYKW	5	S	0456.0	0457.2	7.0	4	1.5		
	9400	TYKW	20	GRF	0457.0	0525	45.0	6	2		
	2695	ATHN	4	S/F	0544.6	0548.0	14.0D	04			
	1415	ATHN	4	S/F	0544.8	0547.3	5.7D	05			
	2000	TYKW	45	C	0546.0	0549.7	7.0	5	1		
	3750	TYKW	45	C	0547.0	0549.7	8.0	5	1		
	9395	PEKG	5	S	0547.0	0548	8.0	14.0	3.0		
	15000	KISV	8	S	0547.5	0548	.5	9			
	9100	GORK	1	S	0547.5	0547.8	1.5	16.0	8.0		
	4995	ATHN	4	S/F	0547.6	0548.0	9.5D	05			
	8800	ATHN	4	S/F	0547.6	0548.0	5.5	17			
	15400	LEAR	8	S	0547.6	0547.8	.2	17			
	8800	LEAR	8	S	0547.6	0547.8	.4	25			
	9400	TYKW	5	S	0547.7	0547.9	1.3	13	4		
	245	LEAR	8	S	0547.8	0548.0	.3	55			
	2695	LEAR	8	S	0549.6	0549.8	.5	15			
	3659	YUNN	20	GRF	0558.0	0634	58.0				RIF 12.
	9400	TYKW	21	GRF	0600.0	0630	160.0D	24	16 D		
	2000	TYKW	21	GRF	0600.0	0710	160.0	5	2.5		
	9395	PEKG	22	GRF	0600.0	0622	115.0	22.0	11.1		
	15000	KISV	27	RF	0601.0	0620	60.0	25			
	9100	GORK	21	GRF	0601.8	0630.7	155.0E	26.0			
	9375	YUNN	20	GRF	0602.0	0630	51.0				RIF 7.
	8800	LEAR	8	S	0602.3	0602.8	.2	17			
	15400	LEAR	4	S/F	0602.8	0604.6	485.6	29			
	3750	TYKW	21	GRF	0603.0E	0638	157.0D	18	10 D		
	8800	LEAR	8	S	0604.8	0605.0	.2	19			
	15400	LEAR	8	S	0604.8	0605.0	.3	26			
	606	LEAR	8	S	0605.8	0607.0	1.3	19			
	15400	LEAR	4	S/F	0607.0	0615.3	58.0	47			
	8800	LEAR	4	S/F	0607.0	0626.0	58.0	45			
	3100	CRIM	20	GRF	0607.0	0712.0	185.0	11	4		
	2840	PEKG	20	GRF	0607.0	0639	84.0D	7.0			
	17000	NOBE	20	GRF	0607.7	0619.1	40.0	24			0
	4995	LEAR	4	S/F	0608.8	0610.5	56.2	18			
	1000	TYKW	8	S	0610.2	0610.3	.2	11	3		
	2695	LEAR	4	S/F	0615.1	0615.3	49.9	13			
	1000	TYKW	45	C	0646.5	0647.1	1.5	3	.5		
	2000	TYKW	45	C	0646.5	0646.7	1.0	2	.7		
	1415	LEAR	4	S/F	0646.6	0647.3	2.2	19			
	9400	TYKW	20	GRF	0710.0	0729	45.0	12	6		
	9100	GORK	1	S	0710.4	0710.9	1.7	18.0	9.0		
	2840	PEKG	45	C	0806.0	0811.1	6.0	4.0	2.0		
	3200	BERN	3	S	0809.0	0811.2	4.0				ONLY PAPER REC
	5200	BERN	3	S	0809.0	0811.2	4.0	14.0			ONLY PAPER REC
	3750	TYKW	5	S	0810.0	0810.9	3.0	6	2		
	9375	YUNN	1	S	0810.0	0811	2.0				RIF 6.
	3659	YUNN	1	S	0810.0	0811	2.0				RIF 3.
	9395	PEKG	5	S	0810.0	0811	10.0	14.0	2.0		
	6100	KISV	4	S/F	0810.3	0810.9	2.0	11			
	15000	KISV	4	S/F	0810.3	0811	2.0	14			
	9400	TYKW	5	S	0810.5	0810.9	2.0	16	6		
	4995	ATHN	4	S/F	0810.5	0810.8	2.1D	10			
	8800	ATHN	8	S	0810.5	0811.1	1.8	17			
	8800	LEAR	8	S	0810.6	0811.0	.4	26			
	4995	LEAR	8	S	0810.8	0811.0	.2	13			
	15400	LEAR	8	S	0810.8	0812.1	1.5	25			
	930	BORD	8	S	0829.8	0829.8	.2	13	1		
	11800	BERN	47	GB	1047.8	1051.4	87.0	670.0			
	8400	BERN	45	C	1047.8	1051.5	87.0	455.0			
	1415	SGMR	4	S/F	1048.1	1051.0	6.7D	28			
	19600	BERN	47	GB	1048.2	1051.4	85.0	800.0			
	5200	BERN	45	C	1048.2	1051.7	93.0	127.0			
	35000	BERN	45	C	1048.2	1051.4	80.0	425.0			
	3200	BERN	45	C	1048.2	1051.5	93.0	53.0			
	15000	KISV	47	GB	1049.0		6.0	620			
	6100	KISV	47	GB	1049.0	1051.8	6.0	590			
	10715	DWIN	45	C	1049.0	1052	6.0	650	300		
	2650	DWIN	2	S/F	1049.0	1052	6.0	50	30		
	8800	SGMR	4	S/F	1049.1	1051.6	5.5D	380			
	15400	SGMR	47	GB	1049.1	1051.3	5.0D	630			
	4995	SGMR	4	S/F	1049.1	1051.8	5.0D	71			
	930	BORD	45	C	1049.2	1051.3	5.8	43	11		
	2695	SGMR	4	S/F	1049.3	1051.6	4.8D	52			
	810	KRAK	8	S	1049.3	1049.5	.3	9.0			
	808	ONDR	2	S/F	1049.5	1051.2	10.0	40.0	10.0		
	536	ONDR	2	S/F	1050.0	1052.7	5.0	17.0	3.0		
	3100	CRIM	3	S	1050.0	1052.0	5.0	60	20		
	810	KRAK	4	S/F	1050.5	1051.3	3.5	85.0	22.0		
	606	SGMR	4	S/F	1050.6	1052.3	3.5D	46			
	430	KRAK	8	S	1052.5	1052.7	.5	39.0			
	15000	KISV	29	PBI	1055.0		40.0	65			
	29	UPIC	3	S	1056.0	1056.2	.4				

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18	33	UPIC	2	S/F	1056.1	1056.2	.4				
	29	UPIC	3	S	1116.1	1116.3	.3				
	33	UPIC	2	S/F	1116.2	1116.3	.2				
	536	ONDR	8	S	1231.1	1231.1	.2	54.0			
	8800	ATHN	4	S/F	1235.5	1304.8	98.1	32			
	4995	ATHN	4	S/F	1239.0	1408.3	94.6D	44			
	1415	ATHN	4	S/F	1243.3	1258.3	79.2D	34			
	2695	ATHN	4	S/F	1243.3	1258.6	85.2D	24			
	430	KRAK	8	S	1245.5	1245.7	.5	27.0			
	2800	OTTA	1	S	1305.0	1307.2	7.0	8.8	3.8		
	2695	SGMR	8	S	1306.0	1307.1	2.0	09			
	606	SGMR	8	S	1306.1	1306.1	.2D	07			
	1415	SGMR	8	S	1306.1	1306.3U	.2D	09.U			
	2800	OTTA	260	FAL	1315.0	1355	40.0	-10.0	-5.0		
	2800	OTTA	20	GRF	1425.6	1440	35.0	5.0	2.5		
	9400	HUAN	1	S	1634.4	1635.4	2.6	8.4	3.7		0
	2800	OTTA	21	GRF	1720.0	1815	90.0	4.0	2.0		
	2800	OTTA	1	S	1721.0	1722	2.0	5.6			
	2800	OTTA	20	GRF	2015.0	2030	50.0	2.6	1.3		
	2800	OTTA	21	GRF	2055.0	2145	90.0	6.0	3.4		
	3750	TYKW	21	GRF	2110.0	2155	95.0	11	6		
	2000	TYKW	21	GRF	2110.0	2150	95.0	4	2		
	2000	TYKW	45	C	2112.0	2112.7	6.0	25	5		
	9400	TYKW	45	C	2112.0	2116.3	8.0	230	65		
	2800	OTTA	4	S/F	2112.5	2116	8.5	15.6	5.2		
	1000	TYKW	45	C	2113.0U	2115.8	6.0U	12 U	3 U		
	3750	TYKW	45	C	2113.0	2116.0	9.0	26	6		
	17000	NOBE	45	C	2114.6	2116.4	4.5	339			0
	17000	NOBE	29	PBI	2119.1	2119.1	19.0	17			0
	9400	TYKW	30	PBI	2120.0		90.0	21	8		
	3750	TYKW	5	S	2214.0	2215	3.0	3	1		
	3750	TYKW	5	S	2232.5	2233.3	2.0	6	2		
	9400	TYKW	5	S	2244.0	2244.7	3.0	7	1.5		
	3750	TYKW	21	GRF	2300.0	2340	120.0	6	3		
	2000	TYKW	20	GRF	2300.0	2330	70.0	2	1		
	9400	TYKW	21	GRF	2305.0	2350	115.0	4	2		
	410	LEAR	8	S	2342.0	2342.8	1.5	10			
	245	LEAR	8	S	2342.8	2343.0	.3	170			
19	245	LEAR	43	NS	0022.0	0845.3	569.0D	81			
	200	GORK	44	NS	0349.0E		425.0D		5.0		
	100	GORK	43	NS	0400.6		408.0E		5.0		
	410	LEAR	43	NS	0453.8	0657.8	297.2D	18			
	127	TORN	44	NS	0600.0E	0847.6	600.0D	460	8		V1
	260	ONDR	44	NS	0600.0E		491.0D	64.0	3.0		
	33	UPIC	43	NS	0652.7	0945.1	528.4D				
	29	UPIC	43	NS	0652.8	0945.8	528.5D				
	208	VORO	44	NS	2200.0E		360.0D		17		
	245	LEAR	43	NS	2255.0	2325.8	655.0D	96			
	9395	PEKG	1	S	0004.5	0005	4.5	9.0	3.0		
	410	LEAR	8	S	0005.5	0006.0	.8	45			
	410	LEAR	8	S	0011.8	0012.0	.3	10			
	410	LEAR	8	S	0015.1	0015.8	1.0	10			
	9400	TYKW	45	C	0026.0	0027	9.0	4	1		
	3750	TYKW	5	S	0026.5	0031	15.0	3	1		
	15400	LEAR	8	S	0031.3	0031.6	.2	13			
	9400	TYKW	21	GRF	0115.0	0145	105.0U	4	2 U		RAIN
	2000	TYKW	21	GRF	0115.0	0200	115.0	3	1		
	3750	TYKW	21	GRF	0115.0	0200	116.0	5	3		
	9400	TYKW	5	S	0119.0	0120	3.0	3	1		
	3750	TYKW	5	S	0119.8	0120.0	4.0	5.5	1.5		
	3750	TYKW	5	S	0143.0	0144.6	7.0	2.5	1		
	410	LEAR	8	S	0150.0	0150.3	.8	13			
	3750	TYKW	5	S	0152.0	0152.7	3.0	3	1		
	1000	TYKW	5	S	0223.0	0223.3	1.0	1	.3		
	2000	TYKW	5	S	0223.0	0223.3	1.0	3	1		
	606	LEAR	8	S	0223.0	0223.1	.8	80			
	245	LEAR	8	S	0252.0	0252.3	1.1	41			
	410	LEAR	8	S	0252.6	0252.3	.8	15			
	606	LEAR	8	S	0252.1	0252.3	.4	01			
	9400	TYKW	21	GRF	0314.0	0404	200.0U	15	7 U		RAIN
	2000	TYKW	21	GRF	0314.0	0419	190.0	8	4		
	3750	TYKW	21	GRF	0315.0	0400	210.0	9	5		
	2840	PEKG	22	GRF	0332.0	0432.5	80.0	6.1	6.0		
	9395	PEKG	20	GRF	0341.0	0351	77.0	9.0	4.0		
	2000	TYKW	5	S	0344.0	0345	15.0	1.5	.7		
	1000	TYKW	45	C	0344.6	0345.1	.6	150	15		
	245	LEAR	8	S	0352.0	0352.6	1.1	29			
	606	LEAR	8	S	0352.8	0353.0	.3	18			
	2000	TYKW	20	GRF	0420.0	0434	35.0	2	1		
	3750	TYKW	20	GRF	0420.0	0430	30.0	3	1.5		
	606	LEAR	8	S	0422.8	0422.8	.3	16			
	100	GORK	41	F	0434.8	0435.2	12.5	220.0D			
	100	GORK			0434.8	0444.8		220.0D			
	100	GORK			0434.8	0441.7		220.0D			

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19	100	GORK		0434.8	0439.4		220.0D			
	100	GORK		0434.8	0440.2		220.0D			
	2000	TYKW	20 GRF	0515.0	0530	45.0	2	1		
	3750	TYKW	20 GRF	0520.0	0537.5	35.0	5	1.5		
	9400	TYKW	45 C	0525.0	0537.5	20.0	4	1.5		
	100	GORK	1 F	0539.1	0540.6	6.7	230.0D			
	100	GORK		0539.1	0542.6		230.0D			
	100	GORK		0539.1	0545.3		160.0			
	2000	TYKW	5 S	0617.0	0618	3.0	1	.5		
	3750	TYKW	5 S	0626.0	0628.7	5.0	2	.7		
	3659	YUNN	7 C	0645.0	0650	12.0				RIF 25.2
	5200	BERN	4 S/F	0646.6	0650.0	45.0	55.0			ONLY PAPER REC
	19600	BERN	4 S/F	0646.6	0650.0	16.0	56.0			ONLY PAPER REC
	11800	BERN	4 S/F	0646.6	0650.0	45.0	127.0			ONLY PPAER REC
	3200	BERN	4 S/F	0646.6	0650.0	45.0				ONLY PAPER REC
	8400	BERN	4 S/F	0646.6	0650.0	45.0	78.0			ONLY PAPER REC
	9395	PEKG	45 C	0647.0	0649.8	10.0	91.0	20.0		
	2650	DWIN	45 C	0647.6	0650	8.0	80	30		
	3750	TYKW	45 C	0647.0	0650.1	10.0	51	9		
	3750	TYKW	21 GRF	0647.0	0705	45.0	6	2.5		
	2000	TYKW	21 GRF	0647.0	0710	125.0	4	2		
	2000	TYKW	45 C	0647.0	0649.7	11.0	89	11		
	2840	PEKG	45 C	0647.3	0650.2	11.5	59.0	10.0		
	2950	GORK	4 S/F	0647.3	0650.1	7.4	60.0			
	3000	IZMI	21 GRF	0647.5	0650.0	7.5	56	38		
	2695	ATHN	4 S/F	0647.5	0649.8	5.8D	87			
	4995	ATHN	4 S/F	0647.5	0649.8	6.3D	68			
	8800	ATHN	4 S/F	0647.5	0649.8	8.3	92			
	9400	TYKW	45 C	0648.0U	0649.8	7.0U	100 U	20 U		RAIN
	9375	YUNN	7 C	0648.0	0650	9.0				RIF 27.7
	10715	DWIN	45 C	0648.0	0650	7.0	110	50		
	6100	KISV		0648.0	0652		14			
	15000	KISV		0648.0	0652.3		47			
	3100	CRIM	3 S	0648.0	0651.0	8.0	64	21		
	6100	KISV	45 C	0648.0	0649.9	6.0	29			
	15000	KISV	45 C	0648.0	0650.1	6.0	81			
	6100	KISV		0648.0	0650.2		25			
	5730	IRKU	1 S	0648.0	0649.8	3.0	50	14		R
	1415	ATHN	4 S/F	0648.1	0650.0	5.2D	51			
	9100	GORK	46 C	0648.5	0649.8	4.5	96.0			
	9100	GORK		0648.5	0652.1		38.0			
	9100	GORK		0648.5	0650.2		90.0			
	8800	LEAR	4 S/F	0648.8	0649.8	4.3	119			
	1000	TYKW	45 C	0649.0	0650.2	6.0	8	3		
	4995	LEAR	4 S/F	0649.1	0649.8	3.0	51			
	17000	NOBE	7 C	0649.2	0650.1	5.0	61			B
	15400	LEAR	4 S/F	0649.3	0650.1	3.8	74			
	2695	LEAR	8 S	0649.3	0650.1	1.8	70			
	1415	LEAR	8 S	0649.5	0650.0	1.6	59			
	950	GORK	2 S/F	0649.5	0650.1	5.8	5.0			
	2950	GORK	29 PBI	0654.7	0654.7	41.3	10.0	5.0		
	9395	PEKG	29 PBI	0657.0	0701	40.0	6.0	4.0		
	2840	PEKG	29 PBI	0658.0	0706	39.0	6.0	4.0		
	8800	ATHN	4 S/F	0706.6	0708.8	5.0	34			
	1000	TYKW	5 S	0724.0	0724.2	.5	3	1		
	3750	TYKW	5 S	0724.0	0724.2	1.0	2	.5		
	100	GORK	8 S	0724.3	0724.3	.8	260.0D			
	9375	YUNN	1 S	0726.0	0727	3.0				RIF 4.6
	2000	TYKW	21 GRF	0735.0	0803	50.0	3	1.5		
	2840	PEKG	28 PRE	0737.0	0815	49.0	8.0	5.0		
	3750	TYKW	21 GRF	0740.0	0803	60.0	4	2		
	1000	TYKW	45 C	0749.7	0750.8	1.5	35	5		
	930	BORD	46 C	0749.8	0749.9	1.5	28	3		
	9100	GORK	21 GRF	0751.3	0831.4	117.0	12.0			
	9395	PEKG	21 GRF	0752.0	0805.8	28.0	19.0	3.3		
	1000	TYKW	45 C	0758.7	0759.4	1.5	3	1		
	3750	TYKW	5 S	0804.0	0806	5.0	4	2		
	6100	KISV		0805.0	0807.3		14			
	6100	KISV	45 C	0805.0	0805.7	4.0	16			
	9100	GORK	45 C	0805.3	0805.8	27.0	20.0			
	9100	GORK		0805.3	0807.2		9.0			
	9400	TYKW	5 S	0805.5	0805.7	.6	17	5		
	8800	LEAR	8 S	0805.6	0805.6	.2	25			
	4995	ATHN	4 S/F	0805.6	0807.0	5.9D	17			
	8800	ATHN	4 S/F	0806.3	0806.5	4.2	29			
	2950	GORK	21 GRF	0824.3	0830.0	29.0	3.0	1.5		
	8800	ATHN	4 S/F	0824.5	0826.0	17.5D	43			
	2000	TYKW	5 S	0824.5	0825.3	1.5	3	.7		
	4995	ATHN	4 S/F	0824.6	0826.0	17.4D	32			
	950	GORK	1 S	0824.9	0825.3	.9	5.5	2.5		
	9395	PEKG	3 S	0825.0	0827	19.0	34.0	6.0		
	1000	TYKW	5 S	0825.0	0825.3	1.0	6	1.5		
	19600	BERN	20 GRF	0825.1	0827.0	25.0	42.0			ONLY PAPER REC
	11800	BERN	20 GRF	0825.1	0827.0	25.0	47.0			ONLY PPAER REC
	8400	BERN	3 S	0825.1	0827.0	25.0	37.0			ONLY PAPER REC

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
19	3200	BERN	3	S	0825.1	0827.0	25.0				ONLY PAPER REC
	650	GORK	1	S	0825.1	0825.4	.5	3.4	1.5		
	2695	ATHN	4	S/F	0825.3	0826.0	16.7D	41			
	15000	KISV	4	S/F	0825.5	0826.9	3.0	23			
	6100	KISV	4	S/F	0825.5	0826.9	4.0	25			
	8800	MANI	4	S/F	0825.6	0827.3	2.5D	73			
	2000	TYKW	5	S	0826.0	0826.8	3.0	5	1.5		
	1000	TYKW	5	S	0826.0	0827.0	2.0	5	2		
	3750	TYKW	5	S	0826.0	0826.9	4.0	25	7		
	9375	YUNN	1	S	0826.0	0827	2.0				RIF 12.
	10715	DWIN	1	S	0826.0	0827	2.0	40	20		
	3659	YUNN	1	S	0826.0	0827	3.0				RIF 17.3
	2650	DWIN	1	S	0826.0	0827	2.0	15	10		
	2840	PEKG	45	C	0826.0	0827.1	5.0	29.0	13.0		
	9100	GORK	1	S	0826.2	0826.9	2.5	30.0	15.0		
	3100	CRIM	1	S	0826.2	0827.0	3.0	25	8		
	2950	GORK	3	S	0826.3	0827.0	2.8	19.0	9.0		
	9400	TYKW	5	S	0826.3	0826.7	1.0	28	9		
	2695	MANI	4	S/F	0826.3	0827.1	3.3D	23			
	5730	IRKU	1	S	0826.4	0827.0	3.0	40	14		L
	2695	LEAR	8	S	0826.5	0826.8	.8	23			
	8800	LEAR	4	S/F	0826.5	0826.8	.6D	35			
	4995	LEAR	8	S	0826.5	0826.8	.8	36			
	4995	MANI	4	S/F	0826.6	0827.3	3.0D	48			
	2840	PEKG	29	PBI	0831.0		24.0	7.1	5.1		
	930	BORD	41	F	0831.5	0831.9	.6	15	2		
	1000	TYKW	5	S	0831.6	0831.9	.6	6	1.5		
	650	GORK	1	S	0831.7	0832.0	.5	2.2			
	228	HARS	45	C	0844.0	0945.2	3.0	500	115		
	3100	CRIM	26	FAL	0853.0	1004.0		13			
	6100	KISV	45	C	0859.0	0900	2.0	5			
	6100	KISV	1	S	0908.3	0908.6	1.0	4			
	6100	KISV	1	S	0914.5	0914.7	.5	3			
	9100	GORK	1	S	0938.4	0939.0	1.0	30.0	15.0		
	100	GORK			0942.0	0943.3		340.0			
	100	GORK			0942.0	0945.7		7100.0			
	100	GORK	41	F	0942.0	0942.5	4.7	340.0D			
	127	TORN	47	GB	0942.0	0945.8	6.0	5700	200		
	200	GORK			0942.1	0946.0		280.0			
	200	GORK	41	F	0942.1	0942.6	4.0	55.0			
	204	IZMI	4	S/F	0944.5	0945.8	2.0	420	300		
	808	ONDR	1	S	0944.7	0945.3	1.0	28.0	2.0		
	2950	GORK	1	S	0944.8	0945.0	1.2	5.0	2.5		
	245	LEAR	47	GB	0944.8	0945.8	1.3	680			
	930	BORD	41	F	0945.0	0945.4	1.0	66	3		
	650	GORK	4	S/F	0945.0	0945.4	1.9	26.0			
	950	GORK	4	S/F	0945.0	0945.3	5.1	24.0			
	430	KRAK	8	S	0945.0	0945.5	1.0	500.0			
	536	ONDR	8	S	0945.0	0945.3	.6	59.0D			
	260	ONDR	8	S	0945.0	0945.5	1.0	209.0D			
	810	KRAK	8	S	0945.2	0945.5	.7	49.0			
	410	LEAR	8	S	0945.3	0945.5	.5	190			
	606	LEAR	8	S	0945.3	0945.5	.3	33			
	810	KRAK	8	S	1036.0	1036.0	.1	17.0			
	930	BORD	8	S	1036.1	1036.2	.2	22	2		
	430	KRAK	42	SER	1037.0	1039.0	16.5	53.0			
	8800	ATHN	47	GB	1048.6	1051.5	22.2	570			
	4995	ATHN	4	S/F	1048.8	1051.6	18.7D	139			
	1415	ATHN	4	S/F	1049.1	1051.0	12.0D	22			
	6100	KISV	1	S	1050.3	1051	1.0	4			
	9400	HUAN	21	GRF	1231.2	1258.5	62.9	11.2	6.9		0
	9400	HUAN	2	S/F	1241.8	1242.2	1.8	9.3	5.6		0
	5200	BERN	3	S	1241.8	1242.3	1.5	14.0			ONLY PAPER REC
	3200	BERN	3	S	1241.8	1242.3	1.5				ONLY PAPER REC
	2800	OTTA	1	S	1242.0	1242.3	1.0	4.4	2.2		
	6100	KISV	4	S/F	1242.0	1242.4	1.0	9			
	2800	OTTA	21	GRF	1247.0	1315	110.0	6.4	3.2		
	3200	BERN	21	GRF	1247.0	1251.2	85.0	21.0			
	8400	BERN	21	GRF	1247.0	1251.1	85.0	23.0			
	11800	BERN	21	GRF	1247.0	1251.0	85.0	17.0			
	5200	BERN	21	GRF	1247.0	1251.1	85.0	28.0			
	4995	ATHN	4	S/F	1249.0	1251.3	8.0D	28			
	2695	ATHN	4	S/F	1249.3	1251.3	3.7D	23			
	8800	ATHN	4	S/F	1249.5	1251.3	7.6	24			
	6100	KISV	4	S/F	1249.5	1251.2	4.0	16			
	2800	OTTA	3	S	1250.0	1251.2	5.0	17.6	6.0		
	2650	DWIN	1	S	1250.0	1251	3.0	20	10		
	9400	HUAN	2	S/F	1250.3	1251.4	1.8	18.6	8.8		0
	9400	HUAN	1	S	1309.2	1309.8	1.8	16.7	7.9		0
	11800	BERN	21	GRF	1503.0	1538.2	100.0U	93.0			
	5200	BERN	21	GRF	1503.0	1538.3	100.0	55.0			
	3200	BERN	21	GRF	1503.0	1538.3	100.0	28.0			
	8400	BERN	21	GRF	1513.0	1538.2	90.0	97.0			
	9400	HUAN	21	S	1513.5	1541.8	96.8	22.3	8.7		0
	2800	OTTA	20	GRF	1515.0	1518	12.0	6.4	2.2		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
19	19600	BERN	21 GRF	1519.0	1538.2	70.0	60.0			
	4995	ATHN	4 S/F	1535.0	1538.3	14.1D	61			
	2800	OTTA	21 GRF	1535.0	1610	80.0	5.0	2.5		
	8800	ATHN	4 S/F	1535.8	1538.3	13.5	70			
	4995	SGMR	47 GB	1536.1	1538.1	9.9D	43			
	8800	SGMR	47 GB	1537.0	1538.1	10.8D	100			
	10715	DWIN	4 S/F	1537.0	1538	8.0	110	30		
	9400	HUAN	3 S	1537.1	1538.1	2.7	92.9	39.6		0
	2695	SGMR	8 S	1537.8	1538.1	1.8D	28			
	1415	SGMR	8 S	1537.8	1539.0	1.3D	57			
	15400	SGMR	8 S	1537.8	1538.1	1.5	83			
	2650	DWIN	1 S	1538.0	1538	2.0	20	10		
	2800	OTTA	3 S	1538.0	1538.4	2.0	23.0	6.0		
	2695	ATHN	8 S	1538.1	1538.5	2.0D	28			
	9400	HUAN	3 S	1543.2	1544.0	2.3	35.3	14.3		0
	11800	BERN	3 S	1706.0	1712.0	18.0	31.0			ONLY PAPER REC
	8400	BERN	3 S	1706.0	1712.0	18.0	29.0			ONLY PAPER REC
	2800	OTTA	21 GRF	1710.0	1715	60.0	4.0	2.0		
	4995	SGMR	4 S/F	1710.3	1712.5	3.2D	13			
	9400	HUAN	40 F	1710.5	1712.2	2.8	33.4	16.7		0
	2800	OTTA	1 S	1710.5	1712.2	3.0	4.8	2.4		
	8800	SGMR	4 S/F	1711.0	1712.1	3.0D	42			
	2695	SGMR	4 S/F	1711.0	1712.1	2.3D	06			
	15400	SGMR	4 S/F	1711.1	1712.1	2.2	13			
	9400	HUAN	29 PBI	1713.3	1713.3	81.9	13.0	6.0		0
	2800	OTTA	260 FAL	1850.0	1920	30.0	-4.0	-2.0		
	2800	OTTA	20 GRF	1940.0	2025	110.0	5.0	2.5		
	2000	TYKW	21 GRF	2210.0U	2300	140.0U	3	1.5U		
	3750	TYKW	21 GRF	2210.0	2300	150.0	6	3		
	9400	TYKW	21 GRF	2230.0	2300	120.0	8	4		
	100	HIRA	42 SER	2242.4	2252.3	11.4	430			
	1000	TYKW	5 S	2243.0	2243.3	1.0	3	1		
	2000	TYKW	5 S	2243.0	2243.2	1.0	5	1.5		
	3750	TYKW	5 S	2243.0	2243.3	1.0	3	1		
	200	VORO	41 F	2246.0		5.0	200 D			
	3750	TYKW	45 C	2249.0	2252.4	5.0	1.5	.5		
	3750	TYKW	5 S	2316.0	2317	3.0	1.5	.5		
	9400	TYKW	5 S	2316.0	2317	8.0	3	1		
	3750	TYKW	5 S	2344.0	2345	3.0	1	.3		
	3750	TYKW	5 S	2349.0	2351	7.0	2	1		
20	200	GORK	44 NS	0340.0E		533.0D		5.0		
	228	HARS	44 NS	0520.0E	0856.0	300.0D	80	25		
	260	ONDR	44 NS	0630.0E		450.0D	98.0	4.0		
	245	SGMR	43 NS	1130.0	1306.3	96.3D	38			
	200	VORO	44 NS	2200.0E		180.0D		11		
	245	LEAR	43 NS	2255.0	2314.3	581.5	63			
	9400	TYKW	31 ABS	0030.0	0120	150.0	-5	-2.5		
	2000	TYKW	31 ABS	0030.0	0120	105.0	-3.5	-1.5		
	2000	TYKW	5 S	0035.7	0036.1	1.5	2	.5		
	245	LEAR	8 S	0039.3	0039.8	1.5	49			
	3750	TYKW	31 ABS	0040.0	0120	120.0	-6	-3		
	3750	TYKW	5 S	0114.0	0115.6	4.0	1	.3		
	2000	TYKW	20 GRF	0135.0	0144	30.0	1.5	.7		
	2000	TYKW	5 S	0215.0	0218	8.0	1.5	.7		
	2840	PEKG	45 C	0224.0	0229.9	14.0	21.0	4.0		
	9395	PEKG	20 GRF	0225.0	0232.5	18.5	5.3	4.2		
	3750	TYKW	45 C	0225.0	0229.7	12.0	10	2.5		
	9400	TYKW	5 S	0225.0	0232	20.0	5	2		
	200	VORO		0226.0	0231		200 D			
	200	VORO	45 C	0226.0	0229	9.0	200 D			
	1000	TYKW	45 C	0228.0	0229.8	9.0	23	4		
	200	HIRA		0228.0	0231.2		350			WR
	200	HIRA	46 C	0228.0	0228.3	6.0	710	70		0
	500	HIRA	3 S	0228.9	0229.6	2.3	13	8		WL
	100	HIRA	46 C	0228.9	0229.5	7.0	4900	240		WR
	3659	YUNN	1 S	0229.0	0229	1.0				RIF 5.
	2000	TYKW	45 C	0229.0	0229.9	7.0	37	4		
	1415	MANI	4 S/F	0229.0	0230.0	2.6D	23			
	245	LEAR	8 S	0229.3	0229.6	.7	430			
	606	LEAR	8 S	0229.5	0229.8	.6	24			
	606	MANI	4 S/F	0229.5	0230.0	2.1D	18			
	410	LEAR	8 S	0229.6	0229.8	.2	37			
	2695	MANI	8 S	0229.6	0230.3	1.4	27			
	245	LEAR	8 S	0232.1	0233.3	2.0	440			
	15400	LEAR	4 S/F	0232.6	0233.3	65.2	16			
	9375	YUNN	20 GRF	0239.0	0305	38.0				RIF 13.
	2840	PEKG	20 GRF	0300.6	0302	11.0	3.0	3.0		
	9400	TYKW	5 S	0301.0	0302	3.0	3	1.5		
	3750	TYKW	28 PRE	0308.0	0308.8	19.0	4	2		
	2000	TYKW	28 PRE	0308.0	0309	20.0	1.5	1		
	9400	TYKW	28 PRE	0308.5	0309	19.5	7	2		
	3659	YUNN	1 S	0324.0	0332	11.0				RIF 7.
	3750	TYKW	5 S	0327.0	0331.8	10.0	15	8		
	2000	TYKW	5 S	0328.0	0331.9	7.0	5.5	3		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
20	9400	TYKW	5	S	0328.0	0331.8	7.0	22	12		
	9375	YUNN	20	GRF	0329.0	0333	22.0				RIF 3.
	245	LEAR	8	S	0330.8	0330.8	.3	25			
	606	LEAR	8	S	0330.8	0331.1	2.0	11			
	1000	TYKW	5	S	0331.0	0331.7	1.5	3	1		
	410	LEAR	8	S	0331.8	0331.8	.3	10			
	9400	TYKW	30	PBI	0335.0		45.0	11	6		
	2000	TYKW	30	PBI	0335.0		40.0	1.5	.7		
	3750	TYKW	30	PBI	0337.0		180.0	6	2		
	9400	TYKW	20	GRF	0343.0	0345.4	30.0	3	1.5		
	1000	TYKW	45	C	0343.7	0345.4	2.0	6.5	1		
	2000	TYKW	45	C	0343.7	0344.0	2.0	7	1.5		
	3750	TYKW	5	S	0345.0	0345.3	1.0	2	.5		
	9400	TYKW	20	GRF	0425.0	0445	135.0	2	1		
	2000	TYKW	28	PRE	0450.0	0500	10.0	2	.7		
	3750	TYKW	5	S	0500.0	0503.2	4.0	6	2.5		
	2000	TYKW	45	C	0500.0	0504.0	7.0	12	6		
	2950	GORK	20	GRF	0501.7	0503.4	16.0	6.0	3.0		
	1000	TYKW	5	S	0503.0	0503.4	.7	33	8		
	3750	TYKW	29	PBI	0504.0		80.0	3	1.5		
	2000	TYKW	29	PBI	0507.0		65.0	6	3		
	3100	CRIM	26	FAL	0633.0	0748.0		6			
	2000	TYKW	20	GRF	0650.0	0710	80.0	2	1		
	3750	TYKW	20	GRF	0655.0	0720	80.0	4	2		
	9400	TYKW	20	GRF	0655.0	0710	70.0	5	2.5		
	810	KRAK	8	S	0720.7	0721.0	.3	13.0			
	127	TORN	45	C	1013.3	1013.8	2.5	30	10		
	810	KRAK	8	S	1028.5	1028.7	.5	16.0			
	200	GORK	4	S/F	1055.0	1057.4	3.8	60.0D			
	204	IZMI	41	F	1055.1	1057.0	2.8	100			
	29	UPIC	45	C	1055.3	1055.8	2.5				
	33	UPIC	45	C	1055.5	1055.5	2.4				
	127	TORN	7	C	1055.8	1057.3	2.0	150	50		
	100	GORK			1056.0	1057.2		300.0D			
	100	GORK	41	F	1056.0	1056.1	1.9	300.0D			
	2695	ATHN	4	S/F	1056.3	1059.8	9.7D	19			
	410	SGMR	8	S	1057.0	1057.1	.6D	19			
	430	KRAK	8	S	1057.0	1057.2	.5	62.0			
	8800	SGMR	4	S/F	1057.1	1058.8	3.9D	81			
	2695	SGMR	4	S/F	1057.1	1059.6	4.9D	19			
	4995	SGMR	4	S/F	1057.1	1058.8	4.5D	52			
	5200	BERN	3	S	1057.3	1059.7	50.0	58.0			ONLY PAPER REC
	8800	ATHN	4	S/F	1057.3	1058.6	4.5	54			
	3200	BERN	3	S	1057.3	1059.7	50.0				ONLY PAPER REC
	4995	ATHN	4	S/F	1057.6	1059.0	6.0D	47			
	9100	GORK	3	S	1057.7	1058.7	2.6	60.0			
	3100	CRIM	3	S	1057.8	1059.9	6.0	26	9		
	2950	GORK	3	S	1058.0	1059.8	4.6	23.0	11.0		
	2650	DWIN	1	S	1058.0	1100	4.0	20	10		
	10715	DWIN	1	S	1058.0	1059	3.0	60	30		
	15400	SGMR	8	S	1058.1	1059.0	2.0	27			
	4995	ATHN	4	S/F	1059.0	1103.6	4.6D	47			
	9100	GORK	29	PBI	1100.2	1100.3	11.6	17.0			
	430	KRAK	42	SER	1112.5	1113.8	1.5	43.0			
	2800	OTTA	1	S	1139.0	1141	8.0	2.4	1.2		
	2800	OTTA	1	S	1443.0	1444.3	4.0	3.4	1.6		
	2695	SGMR	4	S/F	1610.0	1613.1	25.0D	240			
	2650	DWIN	45	C	1610.0	1612	25.0	195	70		
	8800	SGMR	47	GB	1610.1	1611.1	23.2D	1100			
	3200	BERN	45	C	1610.5	1613.9	69.0	193.0			
	2800	OTTA	46F	C	1610.5	1613.9	23.5	245.0	75.0		
	8400	BERN	47	GB	1610.6	1612.8	57.0	838.0			
	2695	ATHN	4	S/F	1610.6	1613.6	26.5D	180			
	15400	SGMR	47	GB	1610.8	1611.8	17.2	510			
	4995	SGMR	47	GB	1610.8	1612.8	23.2D	800			
	5200	BERN	47	GB	1611.0	1613.8	69.0	822.0			
	10715	DWIN	47	GB	1611.0	1613	23.0	640	200		
	1415	SGMR	4	S/F	1611.1	1614.0	25.0D	110			
	1415	ATHN	4	S/F	1611.1	1613.6	21.2D	86			
	606	SGMR	4	S/F	1611.6	1612.8	16.0D	53			
	35000	BERN	45	C	1611.6	1613.0	28.0U	226.0			
	11800	BERN	45	C	1611.6	1612.8	57.0	469.0			
	19600	BERN	45	C	1611.6	1612.8	28.0U	354.0			
	245	SGMR	47	GB	1611.8	1614.6	19.5D	24000			
	4995	ATHN	47	GB	1611.8	1614.0	22.5D	690			
	8800	ATHN	47	GB	1611.8	1612.6	22.5	670			
	9400	HUAN			1611.8	1613.7		758.5			
	9400	HUAN	47	GB	1611.8	1612.8	14.0	798.0	305.8		R
	930	BORD	45	C	1612.0	1614	15.0	45	14		
	410	SGMR	4	S/F	1613.5	1613.6	14.5	35			
	228	HARS	45	C	1614.6	1617.0	6.0	1000 D	500 D		OFF SCALE
	9400	HUAN	29	PBI	1625.8	1625.8	51.0D	51.9	22.2		R
	2800	OTTA	30	PBI	1634.0	1634	100.0	10.2	5.1		
	2800	OTTA	1	S	1727.0	1728	3.0	2.4	1.2		
	3750	TYKW	20	GRF	2320.0	2333	60.0	3	1		

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21	260	ONDR	44	NS	0620.0E		472.0D	16.0			
	127	TORN	43	NS	0740.6	1124.3	320.0D	50	1		V0
	245	PALE	43	NS	2049.5	0156.3	190.5	55			
	208	VORO	44	NS	2200.0E		300.0D		9		
	9400	TYKW	5	S	0130.0	0131.5	3.0	4	1.5		
	3750	TYKW	5	S	0130.0	0131.4	3.0	9	4		
	2000	TYKW	5	S	0131.2	0131.5	1.0	1	.3		
	3750	TYKW	29	PBI	0133.0		15.0	3	1		
	9400	TYKW	29	PBI	0133.0		15.0	2	1		
	3750	TYKW	5	S	0320.0	0321.6	7.0	2.5	1		
	1415	LEAR	8	S	0323.8	0324.0	.3	10			
	930	BORD	41	F	0647.7	0648	.4	12	2		
	536	ONDR	8	S	0810.8	0810.8	.3	45.0			
	9100	GORK	1	S	0817.0	0818.6	3.9	9.0	4.5		
	3659	YUNN	1	S	0817.0	0819	5.0				RIF 4.6
	9400	TYKW	5	S	0817.0	0818.6	3.0	8	3		
	3750	TYKW	5	S	0817.5	0818.6	5.0	6	2		
	2950	GORK	1	S	0818.0	0818.7	3.0	4.0	2.0		
	3659	YUNN	4	S/F	0835.0	0839	11.0				RIF 5.3
	2950	GORK	1	S	0838.7	0839.3	1.3	4.0	2.0		
	810	KRAK	8	S	0839.2	0839.2	.1	23.0			
	2950	GORK	1	S	0841.6	0842.2	8.0	3.0	1.5		
	930	BORD	8	S	1000.8	1000.9	.2	14	2		
	33	UPIC	2	S/F	1124.0	1124	.4				
	29	UPIC	2	S/F	1124.0	1124.2	.5				
	2800	OTTA	1	S	1227.0	1228.5	3.0	2.2	1.1		
	2800	OTTA	1	S	1337.0	1337.5	2.0	4.2	2.1		
	2800	OTTA	1	S	1358.0	1359	2.0	3.8	2.2		
	9400	HUAN	1	S	1416.6	1417.6	1.9	10.3	8.2		0
	2800	OTTA	21	GRF	1435.0	1457	100.0	9.8	3.0		
	930	BORD	8	S	1447.6	1447.6	.2	50	2		
	2800	OTTA	8	S	1516.0	1516.2	.5	6.4	3.2		
	2800	OTTA	20	GRF	1840.0	1910	75.0	3.2	1.6		
22	245	LEAR	43	NS	0102.3	0803.3	526.7D	65			
	127	TORN	43	NS	1110.0	1335.0	230.0D	1200	2		V1
	9400	TYKW	20	GRF	0045.0	0100	40.0	3	1.5		
	3750	TYKW	5	S	0051.0	0054.3	9.0	7	3		
	9375	YUNN	1	S	0053.0	0054	3.0				RIF 4.
	15400	PALE	4	S/F	0057.3	0057.5	2.5	54			
	8800	PALE	47	GB	0057.5	0057.6	.3	21			
	4995	PALE	8	S	0057.5	0057.6	.1	13			
	3750	TYKW	29	PBI	0100.0		50.0	2.5	1		
	2000	TYKW	20	GRF	0101.0	0106	40.0	2	1		
	9400	TYKW	5	S	0141.0	0141.7	3.0	8	2.5		
	9400	TYKW	45	C	0154.0	0156.8	6.0	6	1.5		
	3750	TYKW	21	GRF	0201.0	0210	90.0	3	2		
	9400	TYKW	21	GRF	0201.0	0255	90.0	6	2		
	8800	LEAR	4	S/F	0228.3	0229.1	3.0	13			
	9400	TYKW	5	S	0228.5	0229.1	1.5	8	3		
	15400	PALE	8	S	0231.1	0231.3	.5	26			
	4995	PALE	8	S	0231.1	0231.6	.2	15			
	8800	PALE	8	S	0231.1	0231.5	1.5	32			
	4995	PALE	8	S	0246.3	0247.1	1.8	15			
	2695	PALE	8	S	0246.3	0247.1	1.8	15			
	8800	PALE	8	S	0246.5	0246.6	1.6	36			
	15400	PALE	8	S	0246.6	0246.6	1.5	56			
	606	PALE	8	S	0257.3	0257.3	.2	25			
	2695	PALE	8	S	0257.3	0257.3	.2	20			
	1415	PALE	8	S	0257.3	0257.3	.2	22			
	410	PALE	8	S	0257.3	0257.3	.2	32			
	245	PALE	8	S	0257.3	0257.3	.2	33			
	9400	TYKW	5	S	0302.6	0302.8	.5	4	1.5		
	9400	TYKW	5	S	0317.0	0318.1	4.0	19	4		
	4995	LEAR	8	S	0317.1	0318.1	2.0	11			
	3750	TYKW	5	S	0317.5	0318.0	1.5	13	3.5		
	2000	TYKW	5	S	0317.8	0318.2	1.0	6	2		
	2695	PALE	8	S	0317.8	0318.1	.7	20			
	8800	PALE	8	S	0317.8	0318.1	.7	25			
	4995	PALE	8	S	0317.8	0318.1	.7	11			
	15400	LEAR	8	S	0317.8	0318.1	.5	08			
	2695	LEAR	8	S	0318.0	0318.1	.3	16			
	8800	LEAR	8	S	0318.0	0318.1	.3	17			
	3750	TYKW	20	GRF	0340.0	0350	50.0	2	1		
	9400	TYKW	20	GRF	0345.0	0400	60.0	4	2		
	2000	TYKW	5	S	0345.0	0350	15.0	1.5	.7		
	1000	TYKW	45	C	0349.5	0350.4	3.5	4	1		
	1000	TYKW	21	GRF	0410.0	0540 U	90.0	2 U	1		
	2000	TYKW	21	GRF	0410.0	0540	150.0	3	1.5		
	1000	TYKW	5	S	0414.0	0415.2	2.0	2	1		
	2950	GORK	20	GRF	0427.6	0618.3	131.0	8.0	4.0		
	100	HIRA			0449.6	0451.6		560			WR
	100	HIRA	46	C	0449.6	0450.0	5.4	2500	230		WR
	9400	TYKW	45	C	0451.0	0451.7	4.0	6	2		

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22	9400	TYKW	20 GRF	0500.0	0550	100.0	3	1.5		
	3750	TYKW	21 GRF	0510.0	0550	90.0	3	1.5		
	3750	TYKW	5 S	0617.5	0618.4	3.5	2.5	.5		
	2000	TYKW	5 S	0617.5	0618.3	3.5	2	.7		
	200	GORK	8 S	0636.8	0637.8	2.2	70.0			
	204	IZMI	4 S/F	0637.6	0638.0	1.5	86	40		
	2950	GORK	20 GRF	0659.3	0714.2	51.0	7.0	3.5		
	9100	GORK	21 GRF	0701.9	0717.8	34.0	7.0	3.0		
	9400	TYKW	28 PRE	0702.0	0704.8	11.0	8	1.5		
	3750	TYKW	21 GRF	0705.0	0710	40.0	2	1		
	8800	LEAR	4 S/F	0712.6	0714.1	2.5	23			
	9400	TYKW	45 C	0713.0	0714.8	3.0	21	7		
	9375	YUNN	1 S	0713.0	0714	4.0				RIF 3.
	15400	LEAR	8 S	0713.1	0714.3	1.9	15			
	9100	GORK	2 S/F	0713.3	0714.2	2.3	19.0			
	3200	BERN	1 S	0713.7	0714.1	4.0				ONLY PAPER REC
	5200	BERN	1 S	0713.7	0714.1	4.0	14.0			ONLY PAPER REC
	3750	TYKW	5 S	0713.7	0714.2	2.0	5	2		
	4995	LEAR	8 S	0713.8	0714.1	1.2	11			
	9400	TYKW	29 PBI	0716.0		20.0	4	2		
	245	LEAR	8 S	0745.1	0745.1	.2	28			
	410	LEAR	8 S	0745.1	0745.1	.4	24			
	1000	TYKW	5 S	0808.0	0808.7	2.0	13	3		
	3100	CRIM	26 FAL	0820.0	0848.0	-	3			
	33	UPIC	42 SER	0859.1	0905.7	7.3				
	29	UPIC	42 SER	0859.1	0859.8	7.8				
	930	BORD	41 F	0859.9	0859.9	.4	22	2		
	930	BORD	41 F	0927.4	0927.6	.5	51	2		
	100	GORK	41 F	0931.2	0931.4	6.0	210.0D			
	33	UPIC	42 SER	1115.6	1218.7	30.8				
	29	UPIC	42 SER	1156.6	1218.6	29.8				
	9400	HUAN	2 S/F	1251.0	1251.7	1.8	19.2	6.6		L
	33	UPIC	46 C	1331.7	1333.5	4.9				
	29	UPIC	46 C	1331.8	1335.3	3.6				
	9400	HUAN	20 GRF	1332.8	1337.0	12.9	8.7	5.0		0
	245	SGMR	4 S/F	1333.0	1334.8	2.3	119			
	606	SGMR	4 S/F	1333.1	1335.3	3.2D	16			
	2695	SGMR	4 S/F	1333.5	1335.1	2.5D	08			
	2800	OTTA	8 S	1333.7	1333.7	.3	4.6			
	260	ONDR	4 S/F	1334.0	1334.8	1.5	67.0	11.0		
	8800	SGMR	8 S	1334.1	1335.8	2.0D	20			
	2800	OTTA	8 S	1335.4	1335.5	.4	6.4			
	2800	OTTA	8 S	1740.7	1740.7	.1	24.0			
	2800	OTTA	23 GRF	1805.0	2005	285.0	10.8	5.0		
	2800	OTTA	2 S/F	2002.0	2003	3.5	8.2			
	2800	OTTA	1 S	2114.5	2115.7	3.0	3.6	1.8		
	9400	TYKW	28 PRE	2239.0	2242	18.0	12	5		
	8800	PALE	4 S/F	2239.8	2240.8	5.5	22			
	9400	TYKW	45 C	2257.0	2300.3	10.0	79	25		
	8800	PALE	4 S/F	2257.6	2259.3	10.9	119			
	4995	PALE	4 S/F	2257.8	2259.3	6.2	24			
	3750	TYKW	5 S	2258.0	2300.2	3.0	8	4		
	15400	PALE	4 S/F	2258.1	2259.3	5.4	40			
	17000	NOBE	1 S	2258.4	2259.5	3.0	25			L
	8800	MANI	4 S/F	2259.0	2300.5	2.1	00			
	4995	MANI	8 S	2259.0	2300.5	2.0D	20			
	3750	TYKW	29 PBI	2301.0		40.0	3	1.5		
	9400	TYKW	29 PBI	2307.0		40.0	10	4		
	9400	TYKW	21 GRF	2354.0	0033	250.0	16	6		
	3750	TYKW	28 PRE	2359.6	0026	31.0	17	10	D	
	2000	TYKW	28 PRE	2359.0	0008.1	31.0	15	6	D	
	1000	TYKW	28 PRE	2359.0	0004.8	31.0	16	2	D	
23	260	ONDR	44 NS	0610.0E		479.0D	64.0			
	127	TORN	43 NS	0730.0	0825.0	450.0D	70	2		V1
	245	PALE	43 NS	2130.0	0332.0	420.0D	450			
	200	HIRA	43 NS	2140.0	0713	700.0D	170	15		0
	208	VORO	44 NS	2200.0E		360.0D		13		
	410	LEAR	43 NS	2303.0	0905.6	644.0D	01			
	245	LEAR	43 NS	2303.0	0332.1	644.0D	310			
	2695	PENT	21 GRF	0000.0	0027	100.0D	14.8			
	2695	PENT	2 S/F	0004.0	0008	5.5	8.6	4.3		
	2000	TYKW	45 C	0013.2	0013.4	1.0	8	2.5		
	9400	TYKW	5 S	0025.0	0026.3	4.0	4	1.5		
	2000	TYKW	45 C	0026.0	0026.6	1.5	6	1		
	1000	TYKW	5 S	0030.0	0033	20.0	29	11		
	3750	TYKW	5 S	0030.0	0033	20.0	35	20		
	2000	TYKW	5 S	0030.0	0033.2	20.0	47	20		
	2695	PENT	3 S	0031.0	0033.5	17.0	30.2	11.4		
	1000	TYKW	29 PBI	0050.0		30.0	1	.5		
	2000	TYKW	29 PBI	0050.0		140.0	6	2		
	3750	TYKW	30 PBI	0050.0		180.0	9	3		
	9400	TYKW	28 PRE	0225.0	0231	6.0	4	2		
	9375	YUNN	4 S/F	0229.0	0233	29.0				RIF 7.
	3750	TYKW	20 GRF	0230.0	0237	40.0	4	1.5		

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23	9400	TYKW	45 C	0231.0	0232.5	9.0	35	15		
	9400	TYKW	30 PBI	0240.0		80.0	11	3		
	9400	TYKW	45 C	0325.0	0333.8	30.0	14	6		
	3750	TYKW	21 GRF	0430.0	0525	120.0	3	1.5		
	9400	TYKW	21 GRF	0430.0	0525	120.0	8	2.5		
	3750	TYKW	5 S	0450.0	0452.3	3.0	6	2		
	2000	TYKW	21 GRF	0450.0	0525	90.0	2	1		
	3750	TYKW	29 PBI	0453.0		7.0	2	1		
	9400	TYKW	5 S	0500.6	0501	3.0	5	1.5		
	9400	TYKW	45 C	0545.0	0600.3	30.0	8	2		
	2000	TYKW	5 S	0545.0	0550	8.0	6	2.5		
	3750	TYKW	5 S	0546.0	0550	10.0	3	1		
	2950	GORK	1 S	0548.0	0550.0	4.7	4.0	2.0		
	2000	TYKW	29 PBI	0553.0		20.0	2	1		
	33	UPIC	4 S/F	0604.1	0604.4	.8				
	29	UPIC	2 S/F	0604.2	0604.6	.5				
	100	HIRA	46 C	0604.2	0604.5	1.0	14000	2900		WR
	9400	TYKW	5 S	0620.0	0621.0	3.0	6	1.5		
	9100	GORK	1 S	0620.6	0621.0	1.7	8.0	4.0		
	2000	TYKW	21 GRF	0640.0	0715	100.0	4	2		
	9400	TYKW	20 GRF	0640.0	0650	70.0	7	3		
	3750	TYKW	20 GRF	0640.0	0715	100.0	5	2		
	2000	TYKW	5 S	0657.0	0657.4	1.5	2	.7		
	1000	TYKW	5 S	0657.3	0657.6	1.0	1	.3		
	1000	TYKW	5 S	0721.0	0721.9	2.0	1.5	.5		
	33	UPIC	42 SER	1003.1	1003.2	158.0				
	29	UPIC	42 SER	1003.2	1003.6	158.2				
	204	IZMI	8 C	1006.0	1007.0	.3	100	78		
	9100	GORK	22 GRF	1022.6	1040.6	21.7	4.7			
	9100	GORK	1 S	1102.5	1103.2	2.3	5.3	2.5		
	5200	BERN	20 GRF	1122.0	1132.7	100.0	12.0			
	9100	GORK	22 GRF	1132.4	1132.8	11.0	7.0			
	810	KRAK	8 S	1150.7	1150.7	.2	21.0			
	3100	CRIM	20 GRF	1150.8	1155.2	28.0	4	1		
	536	ONDR	4 S/F	1241.7	1242.5	1.5	53.0	2.0		
	5200	BERN	20 GRF	1300.6	1305.0	30.0	12.0			
	8400	BERN	20 GRF	1300.3	1305.3	30.0	31.0			
	19600	BERN	20 GRF	1301.0	1305.1	26.0	26.0			
	11800	BERN	20 GRF	1301.0	1305.1	50.0	40.0			
	10715	DWIN	1 S	1304.0	1305	3.0	40	20		
	9400	HUAN	4 S/F	1304.2	1305.2	2.6	30.0	16.5		L
	5200	BERN	21 GRF	1414.0	1415.5	45.0	34.0			ONLY PAPER REC
	3200	BERN	21 GRF	1414.0	1415.5	45.0				ONLY PAPER REC
	8400	BERN	21 GRF	1414.0	1415.6	7.0	28.0			
	2800	OTTA	21 GRF	1414.0	1430	40.0	4.4	2.2		
	2800	OTTA	3 S	1414.5	1415.7	3.0	14.2	7.0		
	9400	HUAN	4 S/F	1414.7	1415.7	2.3	21.2	9.4		0
	2650	DWIN	1 S	1415.0	1416	3.0	15	10		
	10715	DWIN	1 S	1415.0	1415	1.0	15	10		
	2800	OTTA	1 S	1458.0	1500	5.0	2.2	1.1		
	2800	OTTA	240AR	1550.0	1700	70.0	8.4	4.2		
	2800	OTTA	1 S	1624.8	1625.3	6.0	4.6	2.2		
	9400	HUAN	21 GRF	1638.0	1655.4	32.7	12.4	3.5		L
	9400	HUAN	4 S/F	1650.1	1652.0	4.3	79.6	37.3		L
	3200	BERN	20 GRF	1651.2	1652.0	17.0				ONLY PAPER REC
	11800	BERN	20 GRF	1651.2	1652.0	6.0	112.0			
	8400	BERN	20 GRF	1651.2	1652.0	13.0	79.0			
	5200	BERN	20 GRF	1651.2	1652.0	17.0	25.0			ONLY PAPER REC
	19600	BERN	20 GRF	1651.5	1652.1	4.0	126.0			
	35000	BERN	20 GRF	1651.5	1652.1	3.0	78.0			ONLY PAPER REC
	2800	OTTA	3 S	1652.0	1652.2	3.0	16.0	4.0		
	2800	OTTA	21 GRF	1940.0	2025	85.0	6.4	3.0		
	2800	OTTA	1 S	2017.5	2018.5	2.0	9.6	4.8		
	2800	OTTA	45 C	2023.0	2025.2	3.5	13.6	6.8		
	2800	OTTA	21 GRF	2110.0	2155	95.0	9.2	4.6		
	1000	TYKW	21 GRF	2130.0	2150	90.0	3	1.5		
	3750	TYKW	21 GRF	2130.0	2154	60.0	6	4		
	2000	TYKW	21 GRF	2130.0	2200	90.0	7	3		
	9400	TYKW	21 GRF	2135.0	2154	50.0	9	5		
	17000	NOBE	20 GRF	2202.9	2204.9	11.0	25			0
	9400	TYKW	5 S	2204.0	2204.8	6.0	11	4		
	2000	TYKW	5 S	2204.0	2205	5.0	6	2		
	3750	TYKW	5 S	2204.0	2205.0	6.0	7	2		
	1000	TYKW	5 S	2204.5	2205.0	2.5	6	2		
	2800	OTTA	1 S	2204.5	2205	4.0	4.6	2.3		
	3750	TYKW	5 S	2210.0	2211	3.0	2.5	1		
	9400	TYKW	5 S	2210.0	2211	5.0	4	2		
	9400	TYKW	31 ABS	2225.0	2240	33.0	-16	-8		
	3750	TYKW	31 ABS	2230.0	2245	40.0	-4	-2		
	17000	NOBE	20 GRF	2340.8	2342.2	25.0	19			0
24	100	HIRA	43 NS	0340.0	0735	340.0D	680	115		
	200	GORK	44 NS	0414.0E		349.0D		25.0		
	204	IZMI	43 NS	0600.0		225.0D	200			
	127	TORN	44 NS	0600.0E	0726.8	540.0D	2000	19		V0

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24	260	ONDR	44 NS	0602.0E		577.0D	104.0	10.0		
	100	GORK	44 NS	0606.0E		234.0D		10.0		
	430	KRAK	43 NS	0709.5	0730.2	50.0U	49.0	12.0		
	810	KRAK	43 NS	0710.0	0734.7	46.0	31.0	7.0		
	245	SGMR	43 NS	0953.0	1714.1	790.0D	81			
	3750	TYKW	32 ABS	0010.0	0033	50.5	-3	-2 U		
	3750	TYKW	5 S	0013.0	0014.3	10.0	3.5	1		
	2000	TYKW	32 ABS	0015.0	0033	72.0	-2	-1		
	1000	TYKW	45 C	0017.0	0018.0	5.0	2.5	.5		
	9400	TYKW	5 S	0023.0	0023.7	3.0	6	1.5		
	3750	TYKW	5 S	0023.0	0024	4.0	3	1		
	17000	NOBE	1 S	0023.1	0024.1	1.8	16			L
	1000	TYKW	5 S	0023.5	0024.0	1.5	2	.7		
	9400	TYKW	31 ABS	0027.0	0035	33.5	-5	-3 U		
	9400	TYKW	45 C	0037.0	0045.9	23.0	65	10		
	1000	TYKW	45 C	0039.0	0045.9	11.0	70	12		
	3750	TYKW	45 C	0039.0	0045.9	12.0	49	7		
	35000	NAGO	5 S	0039.0	0045	8.0	18			
	208	VORO	46 C	0041.0	0043	6.0	200 D			
	208	VORO		0041.0	0046		200 D			
	17000	NOBE	7 C	0041.7	0045.7	28.0	75			L
	2000	TYKW	45 C	0042.0	0045.9	11.0	44	8		
	2695	PENT	4 S/F	0042.2	0046	8.0	41.0	10.6		
	5730	IRKU		0045.0	0046.0		60			R
	5730	IRKU	21 GRF	0045.0	0045.3	4.0	30	18		R
	1000	TYKW	30 PBI	0050.0		9.0	3	1		
	3750	TYKW	5 S	0054.0	0056.6	5.0	2	1		
	1000	TYKW	45 C	0054.5	0054.9	3.5	3	1		
	9375	YUNN	30 PBI	0059.0	0100	3.0				RIF 8.
	9400	TYKW	5 S	0100.0	0101.0	3.0	40	18		
	2000	TYKW	5 S	0100.0	0118	23.0	2	1		
	3750	TYKW	5 S	0100.0	0101.2	3.0	11	5		
	5730	IRKU	20 GRF	0100.0	0101.2	3.0	40	14		R
	15400	LEAR	4 S/F	0100.1	0101.1	2.7	30			
	8800	LEAR	8 S	0100.5	0101.1	1.6	46			
	1000	TYKW	45 C	0100.5	0110.6	14.0	5	1		
	2000	TYKW	5 S	0100.5	0101.2	2.5	6	2		
	4995	LEAR	8 S	0100.6	0101.1	1.5	30			
	9400	TYKW	30 PBI	0103.6		12.0	7	7		
	3750	TYKW	29 PBI	0103.0		15.0	4	2		
	9400	TYKW	28 PRE	0115.0	0122	7.0	12	9		
	9375	YUNN	7 C	0121.5	0123	9.0				RIF 26.
	9400	TYKW	45 C	0122.0	0123.7	8.0	126	55		
	3750	TYKW	28 PRE	0122.0	0126.5	16.0	9	6		
	17000	NOBE	45 C	0122.1	0123.3	14.3	190			L
	35000	NAGO	5 S	0123.0	0123	1.0	50			
	9400	TYKW	30 PBI	0130.0		6.0	22	19		
	35000	NAGO	7 C	0132.0	0150	165.0	62			
	9400	TYKW	28 PRE	0136.0	0136.9	3.0	24	20		
	17000	NOBE	45 C	0136.4	0142.9	48.0	114			L
	15400	LEAR	47 GB	0136.5	0142.8	61.8	180			
	3750	TYKW	45 C	0138.0	0143.0	52.0	120	33		
	2000	TYKW	45 C	0138.0	0143.0	52.0	65	15		
	2695	PENT		0138.0	0143	12.0D	71.4			
	9400	TYKW	45 C	0139.0	0142.9	51.0	248	70		
	3659	YUNN	30 PBI	0139.0	0142					RIF 25.
	9375	YUNN	40 F	0139.0	0142					RIF 54.
	8800	LEAR	4 S/F	0139.3	0142.8	59.0	300			
	4995	LEAR	4 S/F	0139.8	0142.8	58.5	200			
	2695	LEAR	47 GB	0139.8	0142.8	55.7	74			
	1000	TYKW	45 C	0140.0	0143.9	40.0	25	4 D		
	5730	IRKU	3 S	0140.0	0143.0	6.0	220	110		R
	1415	LEAR	4 S/F	0140.8	0142.6	5.2	48			
	5730	IRKU	30 PBI	0146.0	0155.3	35.0	85			R
	1000	TYKW	30 PBI	0220.0		90.0	3	1.5		
	1000	TYKW	5 S	0220.7	0221.3	1.3	23	7		
	1000	TYKW	29 PBI	0222.0		7.0	1	.5		
	2000	TYKW	30 PBI	0230.0		70.0	11	5		
	9400	TYKW	30 PBI	0230.0		75.0	23	16		
	3750	TYKW	30 PBI	0230.0		70.0	21	12		
	9400	TYKW	5 S	0255.3E	0255.3U	1.5D	7 D	2 D		
	9400	TYKW	5 S	0314.5	0315	7.0	5	2		
	9400	TYKW	45 C	0325.0	0332.7	16.0	11	4		
	1000	TYKW	45 C	0326.0	0332.6	15.0	12	3		
	17000	NOBE	7 C	0326.2	0330.4	14.0	28			0
	2000	TYKW	45 C	0326.5	0327.5	9.0	14	2.5		
	3750	TYKW	45 C	0327.0	0332.4	13.0	8	2.5		
	245	PALE	47 GB	0334.8	0339.1	5.8	89			
	15400	PALE	8 S	0335.6	0336.0	.5	45			
	2000	TYKW	31 ABS	0340.0	0500	225.0	-8	-4.5		
	3750	TYKW	31 ABS	0340.0	0515	225.0	-16	-10		
	8800	PALE	8 S	0340.3	0340.5	.3	26			
	1000	TYKW	31 ABS	0350.0	0455	210.0	-3	-1.5		
	9400	TYKW	31 ABS	0355.0	0440	210.0	-26	-19		
	17000	NOBE	1 S	0414.9	0415.5	2.5	42			L

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24	15400	LEAR	8 S	0415.1	0415.3	.5	28			
	245	LEAR	4 S/F	0459.6	0505.8	11.7	119			
	15400	LEAR	4 S/F	0459.6	0500.3	14.9	23			
	17000	NOBE	20 GRF	0459.6	0500.3	20.0	25			0
	15400	LEAR	8 S	0500.0	0500.3	.3	23			
	9375	YUNN	21 GRF	0536.0	0538	8.0				RIF 7.1
	15400	LEAR	4 S/F	0537.6	0554.6	20.4	21			
	9100	GORK	22 GRF	0539.2	0554.6	42.0	20.0			
	9400	TYKW	45 C	0540.0	0544.6	45.0	22	10		
	3750	TYKW	20 GRF	0545.0	0605	45.0	5	2.5		
	8800	LEAR	4 S/F	0548.1	0554.6	8.7	17			
	2950	GORK	20 GRF	0548.7	0615.5	42.0	8.0	4.0		
	2000	TYKW	21 GRF	0550.0	0614	45.0	2	1		
	200	GORK	27 RF	0610.0	0713.2	96.0	170.0			
	1000	TYKW	5 S	0612.6	0613.0	.5	19	6		
	2000	TYKW	45 C	0615.0	0616.4	3.0	3	1		
	3200	BERN	45 C	0642.0	0855.3	370.0				ONLY PAPER REC
	5200	BERN	45 C	0642.0	0855.3	370.0	221.0			ONLY PAPER REC
	9100	GORK	23 GRF	0651.0	0908.6	309.0E	90.0			
	2950	GORK	23 GRF	0651.3	0930.0	310.0D	50.0	25.0		
	650	GORK	23 GRF	0655.2		213.8				
	2000	TYKW	5 S	0655.5	0656.3	1.2	4	1		
	3100	CRIM	22 GRF	0705.0	0706.0	67.0	7	2		
	950	GORK	40 F	0718.0	0737.3	44.2	16.0			
	9375	YUNN	20 GRF	0722.0	0724	6.0				RIF 3.5
	15400	ATHN	8 S	0722.3	0722.6	.8	13			
	8800	ATHN	8 S	0722.3	0722.6	.8	13			
	8800	LEAR	8 S	0722.5	0722.6	.3	22			
	3750	TYKW	5 S	0722.5	0723	2.5	3	1		
	9400	TYKW	45 C	0722.5	0722.7	2.0	15	4		
	9400	TYKW	28 PRE	0725.0	0825	75.0	12	5		
	3750	TYKW	20 GRF	0725.0	0730	35.0	4	2		
	930	BORD	40 F	0725.0	0737.4	35.0	14	5		
	1000	TYKW	45 C	0726.0	0745.0	35.0	21	4		
	2000	TYKW	45 C	0726.0	0729.2	36.0	13	3.5		
	3100	CRIM	40 F	0726.0	0729.0	13.0	8	3		
	245	LEAR	8 S	0736.0	0737.0	1.8	130			
	410	LEAR	8 S	0736.0	0737.1	1.6	22			
	15000	KISV	3 S	0736.5	0737	2.0	10			
	2695	LEAR	8 S	0736.6	0736.8	.2	13			
	4995	LEAR	8 S	0736.6	0736.8	.2	11			
	15400	LEAR	8 S	0736.6	0737.3	.5	18			
	1415	LEAR	47 GB	0736.8	0737.3	.2	13			
	606	LEAR	8 S	0737.1	0737.1	.2	11			
	3100	CRIM	20 PRE	0816.0	0844.0	28.0	10	3		
	950	GORK	23 GRF	0830.0	0912.0	97.0	60.0			
	930	BORD	45 C	0831.0	0847.6	70.0	131	44		
	430	KRAK	45 C	0831.5	0845.0	76.0	210.0	21.0		
	430	KRAK		0831.5	0905.5		600.0			
	430	KRAK		0831.5	0850.5		80.0			
	536	ONDR	48 C	0831.7		78.0	38.0D	14.0		
	6100	KISV		0836.0	0845.8		40			
	6100	KISV	46 C	0836.0	0855	30.0	110			
	6100	KISV		0836.0	0846.7		50			
	3659	YUNN	45 C	0837.0	0856	83.0E				RIF 107.
	1000	TYKW	5 S	0837.5	0837.8	1.0D	13	3.5D		
	9375	YUNN	45 C	0838.0	0855	107.0				RIF 51.
	810	KRAK		0838.5	0903.2		110.0			
	200	GORK	27 RF	0838.5	0856.5	41.5	170.0			
	810	KRAK		0838.5	0854.0		90.0			
	810	KRAK	45 C	0838.5	0848.2	64.0	70.0	37.0		
	3750	TYKW	45 C	0840.0	0855 U	20.0D	170 U	80 U		
	2000	TYKW	45 C	0840.0	0901.8	30.0D	300	100 D		
	9400	TYKW	45 C	0840.0	0855 U	20.0D	125 U	50 U		
	650	GORK	46 C	0843.2	0845.7	64.8	100.0			
	650	GORK		0843.2	0903.3		78.0			
	950	GORK		0843.3	0853.3		107.0			
	950	GORK	46 C	0843.3	0848.2	25.7	135.0			
	950	GORK		0843.3	0903.0		137.0			
	2695	ATHN	4 S/F	0843.3	0855.3	55.5D	240			
	4995	ATHN	4 S/F	0843.3	0855.1	53.7D	119			
	1415	ATHN	4 S/F	0843.3	0903.5	45.5D	270			
	1415	ATHN	4 S/F	0843.3	0903.5	65.5D	270			
	8800	LEAR	47 GB	0843.3	0854.3	31.7	170			
	410	LEAR	47 GB	0843.5	0845.0	14.5	88			
	245	LEAR	47 GB	0843.5	0854.6	16.5	110			
	606	LEAR	47 GB	0843.5	0845.6	34.3	190			
	808	ONDR	48 C	0843.5		70.0	73.0D	32.0		
	8800	ATHN	4 S/F	0843.6	0854.5	49.5	119			
	9100	GORK	45 C	0843.9	0848	67.0				
	9100	GORK		0843.9	0902.5		55.0			
	9100	GORK		0843.9	0854.5		110.0			
	5730	IRKU	21 GRF	0844.0	0848.3	22.0	85	90		R
	3100	CRIM	47 GB	0844.0	0848.0	34.0	131			
	15000	KISV	46 C	0844.0	0848.3	20.0	58			

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24	5730	IRKU			0844.0	0903.0		130			R
	2950	GORK	45	C	0844.0	0846.8	25.0	170.0			
	3100	CRIM			0844.0	0853.5		223 D			
	15000	KISV			0844.0	0854.4		93			
	2950	GORK			0844.0	0902.4		240.0			
	15000	KISV			0844.0	0902		78			
	5730	IRKU			0844.0	0854.7		165			R
	2950	GORK			0844.0	0855.4		280.0			
	3100	CRIM			0844.0	0902.8		197			
	15400	LEAR	47	GB	0844.0	0854.5	30.0	119			
	4995	LEAR	47	GB	0844.0	0854.5	31.0	170			
	2695	LEAR	47	GB	0844.0	0855.3	34.0	230			
	1415	LEAR	47	GB	0844.0	0902.5	34.0	220			
	10715	DWIN	45	C	0844.0	0854	25.0	120	80		
	2650	DWIN	45	C	0844.0	0855	35.0	200	100		
	606	MANI	47	GB	0844.5	0846.6	23.0D	39			
	2695	MANI	47	GB	0844.6	0857.3	26.0D	130			
	4995	MANI	47	GB	0844.6	0855.0	26.0D	110			
	1415	MANI	47	GB	0844.6	0902.6	26.4D	130			
	3000	IZMI	45	C	0845.0	0855.0	30.0	250	146		
	8800	MANI	47	GB	0847.0	0855.0	22.8	150			
	29	UPIC	41	F	0855.5	0945.5	126.0				
	33	UPIC	41	F	0855.5	0920.8	125.9				
	6100	KISV	29	PBI	0906.0			60			
	5730	IRKU	29	PBI	0906.0		20.0	85			R
	3100	CRIM	29	PBI	0918.0	0918.0	232.0D	57	20		
	930	BORD	29	PBI	0941.0	0946.6	57.0	15	4		
	430	KRAK	42	SER	0952.2	0959.5	7.5	3.7			
	6100	KISV	4	S/F	0958.0	0958.9	2.0	8			
	2650	DWIN	45	C	1000.0	1000	16.0	55	25		
	930	BORD	8	S	1120.6	1120.6	.1	71	1		
	2800	OTTA	8	S	1136.0	1136.1	.2	10.8			
	15000	KISV	8	S	1155.0	1155.3	.5	24			
	2800	OTTA	260	FAL	1205.0	1325	80.0	-17.0	-8.5		
	650	GORK	2	SF	1206.0	1207.5	8.0	3.0			
	15000	KISV	1	S	1217.0	1217.5	2.0	37			
	33	UPIC	45	C	1236.6	1237.2	1.4				
	29	UPIC	45	C	1236.8	1237.5	1.1				
	15400	SGMR	8	S	1302.8	1303.3	1.5	29			
	8800	ATHN	47	GB	1343.6	1402.3	131.5	7200			
	35000	BERN	47	GB	1345.0	1358.1	156.0	17390.0			
	19600	BERN	47	GB	1345.0	1358.5	156.0	14700.0			
	5200	BERN	47	GB	1345.0	1402.6	170.0	3355.0			
	8400	BERN	47	GB	1345.0	1402.6	126.0	2200.0D			
	3200	BERN	47	GB	1345.6	1403.0	170.0	1500.0			
	11800	BERN	47	GB	1345.0	1359.8	132.0	6790.0			
	10715	DWIN	49	GB	1345.0		130.0	1100 D			
	2800	OTTA	28	PRE	1347.0	1348.2	2.9	15.8			
	15400	SGMR	49	GB	1347.1	1354.5	7.4D	540			
	2695	ATHN	47	GB	1347.1	1403.3	99.2D	1000			
	4995	SGMR	49	GB	1347.5	1354.5U	7.0D	1500			
	245	SGMR	49	GB	1347.5	1357.0U	9.5D	10000			
	8800	SGMR	49	GB	1347.5	1354.5U	7.0D	4500			
	1415	SGMR	49	GB	1347.5	1355.0U	7.5D	3000			
	2695	SGMR	49	GB	1347.5	1354.5U	7.0D	750			
	410	SGMR	49	GB	1347.5	1357.0U	9.5D	2900			
	606	SGMR	49	GB	1347.5	1355.0U	7.5D	7800			
	536	ONDR	49	GB	1347.5		92.0	50.0D	41.0		
	2650	DWIN	49	GB	1349.0		115.0	500 D			
	1415	ATHN	47	GB	1349.6	1414.1	91.5D	630			
	2800	OTTA	47	GB	1349.9	1403	90.1	1360.0	475.0		
	930	BORD			1351.0	1435.4		957			
	930	BORD			1351.0	1455.5		936			
	930	BORD	47	GB	1351.0	1410.7	84.0	2303	350		
	930	BORD			1351.0	1356		1061			
	808	ONDR	49	GB	1352.8		90.0	98.0D	65.0		
	33	UPIC	49	GB	1353.3	1408.8	77.1				
	260	ONDR	49	GB	1353.5		73.0	216.0D	47.0		
	29	UPIC	48	C	1353.7	1409.6U	41.8				
	228	HARS	28	PRE	1354.4	1356.8	11.2	620	170		
	228	HARS	47	GB	1354.4	1356.8	76.0	620	70		
	127	TORN	27	RF	1355.6	1409.7	51.0	1700	80 D		
	127	TORN	47	GB	1355.8	1401.1	8.0	9800	600		
	245	SGMR	47	GB	1426.8	1433.3	41.2D	490			
	1415	SGMR	47	GB	1428.0	1437.5	47.0D	2600			
	410	SGMR	47	GB	1429.5	1433.5	37.8D	1399			
	606	SGMR	47	GB	1429.5	1433.1	42.5D	1700			
	1415	ATHN	4	S/F	1429.8	1437.3	37.8D	430			
	2695	ATHN	47	GB	1430.5	1435.1	41.5D	760			
	15400	SGMR	47	GB	1431.5	1435.0	45.5D	750			
	2695	SGMR	4	S/F	1431.5	1435.1	46.0D	400			
	8800	SGMR	4	S/F	1431.5	1435.0	45.5D	400			
	4995	SGMR	4	S/F	1431.5	1435.3	44.5D	430			
	930	BORD	29	PBI	1515.0	1607.7	117.0	52	6		
	2800	OTTA	30	PBI	1520.0	1520	180.0	45.0	15.0		

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
24	1415	SGMR	47 GB	1558.1	1607.8	28.0	45			
	606	SGMR	47 GB	1603.3	1608.1	23.0D	62			
	2800	OTTA	2 S/F	1605.0	1608.3	5.0	4.8	2.2		
	2800	OTTA	20 GRF	1630.0	1650	65.0	14.4	7.2		
	2800	OTTA	21 GRF	1840.0	2000	190.0	5.4			
	1415	SGMR	4 S/F	2013.6	2023.3	12.2D	42			
	2800	OTTA	3 S	2018.0	2021.8	15.0	82.0	25.0		
	2695	SGMR	4 S/F	2018.1	2021.6	7.0D	68			
	4995	SGMR	4 S/F	2018.5	2020.5	5.8	28			
	2695	PALE	4 S/F	2018.8	2021.6	8.5	78			
	4995	PALE	4 S/F	2019.6	2020.5	2.2	32			
	2800	OTTA	29 PBI	2033.0	2033	17.0	6.4	3.2		
	9400	TYKW	45 C	2112.0	2113.2	9.0	35	13		RAIN
	15400	PALE	8 S	2112.6	2112.8	.5	40			
	9400	TYKW	29 PBI	2121.0		30.0	10	5		
	1415	ATHN	47 GB	2143.1E	2143.5	8.0	301			
	3750	TYKW	21 GRF	2153.0	2300	220.0	17	6		
	9400	TYKW	21 GRF	2153.0	2255 U	220.0U	20 U	8 U		RAIN
	2000	TYKW	21 GRF	2153.0	2300	220.0	8	4		
	2695	PENT	22 GRF	2153.0	2340	220.0D	17.8			
	3750	TYKW	5 S	2209.6	2211.5	15.0	4	2		
	17000	NOBE		2215.9	2226.4		26			0
	17000	NOBE		2215.9	2351.0		26			0
	17000	NOBE		2215.9	0533.7		38			0
	17000	NOBE		2215.9	2216.1		72			0
	17000	NOBE		2215.9	0056.9		66			L
	17000	NOBE		2215.9	0221.2		78			L
	17000	NOBE		2215.9	0511.3		88			L
	17000	NOBE	7 C	2215.9		582.0				
	17000	NOBE		2215.9	0736.0		38			L
	17000	NOBE		2215.9	0528.6		136			L
	17000	NOBE		2215.9	0716.5		57			L
	17000	NOBE		2215.9	0628.7		63			L
	17000	NOBE		2215.9	0600.3		44			L
	17000	NOBE		2215.9	0254.4		32			0
	17000	NOBE		2215.9	0129.0		59			L
	17000	NOBE		2215.9	2236.5		26			L
	17000	NOBE		2215.9	0607.9		25			L
	17000	NOBE		2215.9	0656.3		25			L
	15400	LEAR	8 S	2308.8	2309.8	1.3	20			
	4995	LEAR	8 S	2308.8	2309.6	1.3	18			
	1415	LEAR	8 S	2308.8	2309.6	1.3	80			
	2695	LEAR	8 S	2308.8	2309.6	1.3	80			
	8800	LEAR	8 S	2308.8	2309.8	1.3	20			
	2000	TYKW	21 GRF	2313.0	0000	130.0	4	2		
	3750	TYKW	28 PRE	2320.0	2331	11.0	5	3		
	15400	PALE	8 S	2324.8	2324.8	.3	34			
	3750	TYKW	5 S	2331.6	2333.9	14.0	26	15		
	8800	PALE	47 GB	2331.1	2333.8	13.7	52			
	4995	PALE	4 S/F	2332.0	2333.8	7.8	52			
	9400	TYKW	45 C	2332.0	2333.9U	12.0	21 U	8		
	4995	LEAR	4 S/F	2332.3	2333.8	5.7	43			
	8800	LEAR	47 GB	2332.6	2334.3	5.2	33			
	15400	PALE	47 GB	2333.5	2336.0	.8	31			
	3750	TYKW	29 PBI	2345.0		40.0	10	4		
25	245	LEAR	43 NS	0445.8	0511.3	300.2D	75			
	260	ONDR	44 NS	0614.0E		486.0D	61.0			
	245	SGMR	43 NS	0951.0	1345.1	549.0D	55			
	208	VORO	44 NS	2200.0E		360.0D		15		
	245	LEAR	43 NS	2257.0	0738.5	791.0D	82			
	15400	LEAR	8 S	0002.3	0002.8	.3	18			
	9400	TYKW	5 S	0029.0	0031	12.0	12	4		
	410	LEAR	8 S	0046.8	0047.0	.3	25			
	3750	TYKW	5 S	0049.5	0051	4.5	1.5	.7		
	9400	TYKW	45 C	0050.0	0056.8	15.0	34	6		
	3750	TYKW	45 C	0056.3	0056.9	2.5	2	.5		
	15400	LEAR	47 GB	0056.3	0056.8	5.3	79			
	8800	LEAR	4 S/F	0056.3	0057.0	4.0	26			
	8800	PALE	8 S	0056.5	0056.8	.6	30			
	15400	PALE	8 S	0056.5	0056.8	.6	92			
	2000	TYKW	5 S	0056.5	0056.9	2.0	3	.5		
	8800	PALE	8 S	0059.1	0059.8	1.2	30			
	15400	PALE	8 S	0059.1	0059.8	1.2	70			
	3750	TYKW	5 S	0059.7	0059.9	.5	1.5	.5		
	15400	PALE	8 S	0112.0	0112.3	1.1	25			
	15400	LEAR	8 S	0112.3	0112.5	.5	22			
	15400	LEAR	8 S	0128.6	0129.0	1.2	51			
	15400	PALE	8 S	0128.8	0128.8	.5	54			
	3750	TYKW	21 GRF	0137.0	0200	75.0	4	2		
	2000	TYKW	20 GRF	0137.0	0147	70.0	3	1.5		
	9400	TYKW	20 GRF	0140.0U	0200 U	75.0U	9 U	4 U		RAIN
	3750	TYKW	5 S	0142.0	0144	5.0	2	1		
	2695	PALE	8 S	0155.0	0155.3	.5	20			
	15400	PALE	8 S	0155.1	0155.3	.7	25			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION GR REMARKS
25	8800	PALE	8	S	0155.1	0155.1	.2	21			
	15400	PALE	4	S/F	0220.6	0221.1	2.5	65			
	15400	LEAR	8	S	0221.1	0221.1	.5	64			
	3750	TYKW	5	S	0226.0	0228.3	6.0	2	.7		
	245	LEAR	4	S/F	0236.3	0236.5	2.3	82			
	245	PALE	8	S	0236.3	0236.5	1.8	220			
	245	LEAR	8	S	0241.8	0242.1	.7	55			
	410	LEAR	8	S	0241.8	0242.1	.5	23			
	606	LEAR	8	S	0242.0	0242.1	.3	07			
	1000	TYKW	45	C	0257.0	0303.9	10.0	3	1	D	
	3750	TYKW	28	PRE	0257.0	0355	99.0	12	6		
	9400	TYKW	28	PRE	0257.0	0351 U	99.0	10 U	7	U	RAIN
	2000	TYKW	28	PRE	0257.0	0405	99.0	6	3		
	1000	TYKW	21	GRF	0430.0	0525	180.0	4	2		
	9100	GORK	21	GRF	0430.0E	0518	240.0D	50.0			
	2950	GORK	21	GRF	0430.0E	0518.0	378.0D	43.0			
	2000	TYKW	5	S	0436.0	0518	144.0	27	20		
	9400	TYKW	45	C	0436.0	0531.0	144.0	62	35	U	
	3750	TYKW	45	C	0436.0	0540	144.0	31	20		
	410	LEAR	4	S/F	0442.0	0443.5	3.0	35			
	8800	LEAR	4	S/F	0442.6	0519.6	47.4	40			
	15400	LEAR	4	S/F	0443.0	0511.1	44.8	26			
	4995	LEAR	4	S/F	0443.6	0518.6	46.4	28			
	2695	LEAR	4	S/F	0443.6	0518.6	46.4	28			
	1415	LEAR	4	S/F	0443.6	0517.8	46.4	13			
	650	GORK	21	GRF	0515.0	0534.7	69.3	4.0			
	15400	LEAR	4	S/F	0524.8	0528.6	13.7	130			
	35000	NAGO	5	S	0528.0	0528	1.0	32			
	9100	GORK	46	C	0528.2	0531.0	7.8	17.0			
	9100	GORK			0528.2	0533.7		13.0			
	950	GORK	1	S	0529.9	0531.2	2.3	4.0	2.0		
	1415	LEAR	4	S/F	0530.0	0531.1	7.5	08			
	8800	LEAR	4	S/F	0530.0	0531.0	6.0	22			
	2695	LEAR	4	S/F	0530.0	0531.5	2.1	08			
	606	LEAR	4	S/F	0530.0	0530.8	5.1	18			
	4995	LEAR	4	S/F	0530.0	0531.5	2.1	08			
	410	LEAR	4	S/F	0530.0	0530.5	17.0	85			
	650	GORK	3	S	0530.2	0531.3	1.7	7.0	3.5		
	3750	TYKW	5	S	0530.3	0531.4	2.0	6	3		
	1000	TYKW	5	S	0530.5	0531.2	2.5	9	2		
	2000	TYKW	5	S	0530.5	0531.3	2.0	4	1.5		
	2950	GORK	1	S	0530.5	0531.4	2.7	8.0	4.0		
	15400	LEAR	4	S/F	0559.8	0600.3	5.2	40			
	15400	LEAR	4	S/F	0607.3	0608.0	2.7	17			
	3750	TYKW	5	S	0610.4	0612.8	2.5	7	2.5		
	2950	GORK	1	S	0610.6	0612.0	1.8	5.0	2.5		
	2950	GORK	5	S	0610.6	0612.0	1.0	2.5			
	15400	LEAR	4	S/F	0628.3	0628.6	3.5	61			
	3100	CRIM	26	FAL	0640.0	0724.0		12	4		
	3750	TYKW	45	C	0653.5	0654.7	2.0	8	2		
	9400	TYKW	30	PBI	0700.0		110.0	28	14		
	3750	TYKW	29	PBI	0700.0		110.0	12	6		
	2000	TYKW	29	PBI	0700.0		110.0	12	6		
	606	LEAR	8	S	0700.0	0700.3	.5	22			
	15400	LEAR	4	S/F	0715.3	0716.6	2.5	41			
	9375	YUNN	2	S/F	0734.5	0735	3.0				RIF 8.
	10715	DWIN	1	S	0735.0	0736	2.0	30	20		
	9400	TYKW	5	S	0735.0	0736.0	4.0	33	10		
	11800	BERN	3	S	0735.3	0736.0	5.0	35.0			
	19600	BERN	3	S	0735.3	0736.0	4.0	42.0			
	8400	BERN	3	S	0735.5	0736.0	5.0	21.0			
	9100	GORK	1	S	0735.5	0736.0	2.7	23.0	10.0		
	15400	LEAR	8	S	0735.6	0736.1	.9	44			
	8800	LEAR	8	S	0735.8	0736.1	.5	30			
	8800	ATHN	8	S	0736.1	0736.5	1.2	24			
	3100	CRIM	26	FAL	0804.0	0900.0		9			
	100	GORK	27	RF	0845.0	0903.9	52.0	230.0			
	650	GORK	21	GRF	0907.7		38.0D	2.0			
	2650	DWIN	1	S	0910.0	0911	2.0	10	5		
	2950	GORK	1	S	0910.7	0911.5	2.1	8.0	4.0		
	9100	GORK	22	GRF	0914.0	0916.0	9.6	20.0			
	430	KRAK	42	SER	0942.5	0943.2	10.5	180.0			
	430	KRAK			0942.5	0951.0		160.0			
	810	KRAK	42	SER	0950.5	0952.0	3.0	63.0			
	650	GORK	40	F	0951.3	0951.8	2.6	30.0			
	930	BORD	41	F	0951.6	0951.6	2.0	18	2		
	650	GORK	4	S/F	1002.4	1006.9	5.4	12.0	5.0		
	430	KRAK	42	SER	1058.5	1104.2	8.5	37.0			
	10715	DWIN	1	S	1145.0	1146	3.0	25	15		
	19600	BERN	3	S	1145.2	1146.0	4.0	61.0			
	8400	BERN	3	S	1145.2	1146.3	4.0	14.0			
	11800	BERN	3	S	1145.2	1146.0	4.0	23.0			
	19600	BERN	21	GRF	1540.0	1545.3	47.0	115.0			
	15400	SGMR	4	S/F	1541.0	1545.3	10.1	94			
	5200	BERN	21	GRF	1543.0	1545.3	45.0	129.0			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
25	11800	BERN	21 GRF	1543.0	1545.3	45.0	120.0			
	8400	BERN	21 GRF	1543.0	1544.9	45.0	161.0			
	3200	BERN	21 GRF	1543.0	1545.3	45.0	62.0			
	2650	DWIN	45 C	1543.0	1545	22.0	60	30		
	10715	DWIN	45 C	1543.0	1545	15.0	130	80		
	2800	OTTA	46F C	1543.0	1545.3	22.0	66.6	30.0		
	2800	OTTA	30 PBI	1605.0	1605	335.0	12.8	6.4		
	15400	SGMR	4 S/F	1738.5	1740.6	24.0D	119			
	4995	SGMR	8 S	1740.0	1740.5	1.5D	20			
	8800	PALE	8 S	1740.3	1740.6	.7	110			
	15400	PALE	8 S	1740.3	1740.6	.8	160			
	15400	SGMR	4 S/F	1815.6	1817.6	5.7	36			
	2800	OTTA	20 GRF	1923.0	1932	14.0	2.6	1.3		
	2800	OTTA	46F C	1943.0	1948	15.0	55.0	16.3		
	3750	TYKW	20 GRF	2117.0	2121	30.0	4	2		
	9400	TYKW	5 S	2125.0	2127.4	12.0	12	4		
	17000	NOBE		2139.1	0615.6		44			L
	17000	NOBE		2139.1	0022.0		49			R
	17000	NOBE		2139.1	0313.3		170			0
	17000	NOBE		2139.1	0148.6		18			L
	17000	NOBE		2139.1	0137.5		18			L
	17000	NOBE		2139.1	2351.7		55			0
	17000	NOBE		2139.1	2345.8		92			0
	17000	NOBE		2139.1	0028.5		18			0
	17000	NOBE		2139.1	2309.0		44			L
	17000	NOBE		2139.1	0053.3		29			0
	17000	NOBE		2139.1	2143.2		158			L
	17000	NOBE		2139.1	2235.2		24			L
	17000	NOBE	7 C	2139.1		620.0				
	17000	NOBE		2139.1	2218.0		18			L
	17000	NOBE		2139.1	0717.4		243			R
	9400	TYKW	5 S	2139.5	2143.2	30.0	32	11		
	15400	PALE	4 S/F	2140.3	2143.1	11.3	139			
	8800	PALE	8 S	2142.8	2143.1	1.5	19			
	3750	TYKW	5 S	2150.0	2157	20.0	1.5	.7		
	9400	TYKW	20 PRE	2217.0	2300.5	47.0	9	4		
	2695	PENT	1 S	2238.3	2239	1.2	2.2	1.1		
	3750	TYKW	5 S	2238.5	2239.0	1.5	3.5	1		
	3750	TYKW	21 GRF	2242.0	2313	75.0	4	1.5		
	2695	PENT	1 S	2259.8	2300.5	1.3	2.2	1.1		
	3750	TYKW	5 S	2300.0	2300.3	2.0	3.5	1.5		
	2000	TYKW	5 S	2300.0	2300.4	1.0	1.5	.5		
	9400	TYKW	45 C	2304.0	2309.2	16.0	27	10		
	15400	PALE	47 GB	2306.3	2309.0	14.2	06			
	8800	PALE	47 GB	2307.6	2311.5	10.0	32			
	15400	LEAR	47 GB	2308.3	2308.8	5.2	77			
	8800	LEAR	47 GB	2309.1	2311.3	2.5	33			
	9400	TYKW	29 PBI	2320.0		20.0	12	5		
	15400	PALE	8 S	2334.0	2334.1	.1	25			
	3750	TYKW	45 C	2341.5	2345.8	12.0	16	3		
	4995	LEAR	4 S/F	2341.8	2345.8	4.8	25			
	2000	TYKW	45 C	2342.0	2345.8	11.0	29	4		
	1000	TYKW	5 S	2342.0	2345.9	11.0	13	2		
	9400	TYKW	45 C	2342.6	2345.6	17.0	55	15		
	15400	LEAR	47 GB	2342.5	2345.8	20.1D	99			
	8800	LEAR	47 GB	2342.8	2345.8	13.5	63			
	35000	NAGO	20 GRF	2343.0	2352	17.0	38			
	606	LEAR	47 GB	2345.1	2345.6	7.2	640			
	1415	LEAR	8 S	2345.3	2345.8	1.3	30			
	2695	LEAR	8 S	2345.3	2345.8	1.0	34			
	2695	PENT	3 S	2345.3	2346	3.0	25.4	6.4		
26	100	GORK	44 NS	0402.0E		328.0D		5.0		
	200	GORK	44 NS	0504.0E		324.0D		5.0		
	127	TORN	44 NS	0600.0E	1033.8	375.0D	80	30		V1
	260	ONDR	44 NS	0743.0E		315.0D	40.0	2.0		
	245	SGMR	43 NS	0950.0	1111.5	136.5D	38			
	2000	TYKW	20 PRE	0002.0	0003.7	13.0	7	3		
	2695	PENT	46F C	0002.0	0003.8	6.0	8.4	2.8		
	410	LEAR	4 S/F	0002.8	0003.1	3.0	89			
	606	LEAR	8 S	0002.8	0002.8	1.0	39			
	1000	TYKW	20 PRE	0003.0E	0003.7	12.0D	6	1.5D		
	3750	TYKW	20 PRE	0003.0E	0006	11.0D	5	3 D		
	4995	LEAR	4 S/F	0005.6	0006.1	8.4	16			
	8800	LEAR	4 S/F	0005.6	0008.0	8.4	21			
	15400	LEAR	4 S/F	0005.8	0006.1	8.2	29			
	8800	PALE	4 S/F	0006.0	0007.6	2.6	28			
	9400	TYKW	20 PRE	0007.0E	0008	8.0D	7	4 D		
	3750	TYKW	45 C	0014.0	0017.1	13.0	50	18		
	2000	TYKW	45 C	0015.0	0021.6	12.0	18	8		
	1000	TYKW	45 C	0015.6	0021.9	15.0	68	6		
	9400	TYKW	45 C	0015.0	0021.8	10.0	40	15		
	2695	PENT	46F C	0015.0	0016.8	9.0	20.2	12.2		
	2930	VORO	42 SER	0015.0	0017	15.0	37			
	4995	PALE	47 GB	0015.3	0017.1	7.5	51			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
26	8800	PALE	47 GB	0015.8	0016.3	2.8	27			
	2695	PALE	47 GB	0016.8	0016.8	3.0	27			
	606	PALE	47 GB	0016.1	0022.1	6.2	81			
	35000	NAGO	5 S	0020.0	0022	4.0	28			
	15400	PALE	4 S/F	0020.8	0021.8	3.2	68			
	1415	PALE	8 S	0021.3	0021.6	.2	13			
	2695	PENT	30 PBI	0024.0	0024	45.0	8.4	2.8		
	9400	TYKW	30 PBI	0025.0		37.0	9	4		
	3750	TYKW	30 PBI	0027.0		37.0	11	4		
	2000	TYKW	30 PBI	0027.0		35.0	6	2.5		
	1000	TYKW	30 PBI	0030.0		33.0	3	1		
	606	LEAR	4 S/F	0050.8	0054.8	4.2	70			
	410	LEAR	47 GB	0050.8	0054.8	4.2	580			
	2000	TYKW	45 C	0051.0	0056.9	10.0	4	1		
	1000	TYKW	8 S	0051.2	0051.3	.2	5	1		
	2695	PENT	1 S	0053.3	0056	5.0	3.8	1.9		
	1000	TYKW	5 S	0054.6	0054.7	.5	2.5	1		
	35000	NAGO	21 GRF	0055.0	0110	355.0	18			
	3750	TYKW	5 S	0055.3	0056.5	3.0	1	.5		
	1000	TYKW	45 C	0055.5	0057.0	3.0	3	1		
	9400	TYKW	5 S	0108.0	0110	5.0	4	2		
	9400	TYKW	21 GRF	0108.0	0119	80.0	11	3		
	3750	TYKW	21 GRF	0117.0	0230	260.0	5	2.5		
	2000	TYKW	21 GRF	0130.0	0210	70.0	2	1		
	9375	YUNN	1 S	0135.0	0138	4.0				RIF 5.
	410	LEAR	8 S	0135.1	0135.3	.2	15			
	9400	TYKW	45 C	0136.0	0137.5	8.0	20	5		
	15400	LEAR	8 S	0137.1	0137.5	.5	24			
	8800	LEAR	8 S	0137.1	0137.5	.5	19			
	9400	TYKW	45 C	0145.6	0148.7	25.0	11	4		
	15400	LEAR	4 S/F	0146.0	0148.5	6.3	38			
	15400	PALE	4 S/F	0147.8	0151.5	3.8	36			
	15400	LEAR	8 S	0201.0	0201.6	.1	16			
	1415	LEAR	8 S	0220.3	0220.8	.7	22			
	1000	TYKW	45 C	0220.3	0220.5	1.0	4.5	1		
	2000	TYKW	5 S	0220.4	0220.5	.6	4	1		
	1000	TYKW	8 S	0226.3	0226.4	.2	4	1		
	9400	TYKW	5 S	0228.5	0230	4.0	4	1.5		
	9400	TYKW	28 PRE	0241.0	0300.6	27.0	13	5		
	1000	TYKW	45 C	0250.0	0251.0	2.0	12	1.5		
	2000	TYKW	28 PRE	0250.0	0310.2	21.5	5.5	1.5		
	3750	TYKW	28 PRE	0250.0	0251.2	21.5	15	3		
	3659	YUNN	1 S	0250.0	0251	5.0				RIF 5.8
	2695	LEAR	8 S	0250.0	0251.0	2.0	10			
	15400	LEAR	4 S/F	0250.0	0250.1	3.3	10			
	4995	LEAR	8 S	0250.0	0251.1	1.5	23			
	8800	LEAR	4 S/F	0250.0	0251.0	3.3	11			
	4995	PALE	8 S	0250.1	0250.5	1.2	20			
	8800	LEAR	8 S	0259.3	0300.6	1.0	13			
	15400	LEAR	8 S	0259.3	0300.6	1.0	11			
	3659	YUNN	2 S/F	0307.0	0314	14.0				RIF 21.8
	9400	TYKW	45 C	0308.0	0313.3	9.0	78	23		
	8800	LEAR	4 S/F	0308.0	0313.3	7.8	70			
	15400	LEAR	4 S/F	0308.0	0313.3	8.1	180			
	4995	LEAR	4 S/F	0308.0	0313.1	6.8	31			
	1000	TYKW	28 PRE	0309.0	0311.1	2.5	5	1.5		
	15400	PALE	4 S/F	0310.3	0313.3	5.7	220			
	8800	PALE	47 GB	0310.5	0313.1	4.6	69			
	500	HIRA	46 C	0311.0	0312.5U	4.0	150 D	60 D		0
	606	LEAR	47 GB	0311.1	0312.1	3.7	50			
	410	LEAR	47 GB	0311.1	0312.1	1.5	500			
	3750	TYKW	45 C	0311.5	0313.0	8.5	50	19		
	1000	TYKW	45 C	0311.5	0313.1	8.5	47	19		
	2000	TYKW	45 C	0311.5	0313.0	8.5	70	25		
	2695	LEAR	4 S/F	0311.6	0313.0	5.5	71			
	1415	LEAR	4 S/F	0311.6	0313.1	5.7	59			
	606	PALE	47 GB	0311.8	0312.8	3.3	51			
	410	PALE	8 S	0312.0	0312.1	.5	450			
	2695	PALE	4 S/F	0312.0	0312.8	5.3	68			
	35000	NAGO	5 S	0312.0	0313	4.0	80			
	4995	PALE	47 GB	0312.1	0313.1	2.5	27			
	1415	PALE	4 S/F	0312.1	0313.1	5.9	61			
	9400	TYKW	30 PBI	0317.0		16.0	12	6		
	1000	TYKW	29 PBI	0320.0		30.0	6	2		
	3750	TYKW	30 PBI	0320.0		12.0	7	3		
	2000	TYKW	29 PBI	0320.0		30.0	8	2.5		
	9400	TYKW	5 S	0324.0	0324.6	6.0	4	1.5		
	15400	PALE	8 S	0339.3	0340.5	1.3	37			
	8800	PALE	8 S	0340.1	0342.1	2.0	30			
	2695	PALE	8 S	0340.6	0342.1	.2	18			
	9400	TYKW	5 S	0347.0	0419	53.0	28	12		
	3750	TYKW	5 S	0349.0	0352.8	6.0	10	4.5		
	4995	LEAR	4 S/F	0349.8	0352.8	5.2	15			
	3750	TYKW	29 PBI	0355.6		25.0	5	2		
	9100	GORK	20 GRF	0417.0E	0419.8	70.0D	30.0			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
26	410	LEAR	4 S/F	0420.8	0422.1	2.3	17			
	2000	TYKW	21 GRF	0440.0	0505	60.0	2	1		
	9400	TYKW	30 PBI	0440.0		50.0	6	3		
	3750	TYKW	5 S	0448.5	0449.2	1.5	2	.7		
	2000	TYKW	5 S	0448.5	0449.2	2.5	2.5	.7		
	2950	GORK	1 S	0448.6	0449.2	1.0	4.0	2.0		
	1000	TYKW	5 S	0449.0	0449.3	1.0	1	.3		
	3750	TYKW	20 GRF	0457.0	0501	35.0	4.5	2		
	9400	TYKW	5 S	0458.0	0508	22.0	6	3		
	4995	ATHN	47 GB	0511.3	1055.3	402.0D	5300			
	9400	TYKW	28 PRE	0545.0	0616.1	91.0	91	30		
	3750	TYKW	28 PRE	0547.0	0632.9	89.0	53	10		
	9100	GORK	21 GRF	0547.0	0620.6		46.0			
	9375	YUNN	30 PBI	0548.0	0616	77.0				RIF 26.
	3659	YUNN		0548.0	0633					RIF 22.
	3659	YUNN	41 F	0548.0	0643	62.0				RIF 4.4
	3659	YUNN		0548.0	0622					RIF 10.
	8800	LEAR	47 GB	0548.0	0616.0	42.1	85			
	8400	BERN	23 GRF	0600.7	0615.9	66.0	64.0			
	19600	BERN	23 GRF	0601.7	0615.9	15.0	56.0			
	11800	BERN	23 GRF	0601.7	0615.9	66.0	78.0			
	15400	LEAR	47 GB	0606.0	0616.0	22.6	61			
	4995	ATHN	4 S/F	0607.1	0621.6	21.0D	25			
	8800	ATHN	4 S/F	0607.6	0616.3	21.2	46			
	5200	BERN	23 GRF	0609.2	0632.8	50.0	81.0			
	3200	BERN	23 GRF	0613.4	0632.6	50.0	35.0			
	9100	GORK	3 S	0614.5	0616.0	5.1	40.0			
	4995	LEAR	4 S/F	0615.1	0616.0	14.0	30			
	2950	GORK	21 GRF	0615.8	0621.5	96.0	8.0	4.0		
	2000	TYKW	28 PRE	0616.0	0655	60.0	4	2		
	4995	ATHN	4 S/F	0629.3	0632.8	23.0D	55			
	1000	TYKW	45 C	0632.0	0632.9	2.0	31	2.5		
	2000	TYKW	45 C	0632.6	0632.8	2.0	8	2		
	2950	GORK	1 S/F	0632.0	0632.8	1.5	14.0	7.0		
	3100	CRIM	1 S	0632.0	0632.8	5.0	16	5		
	4995	LEAR	4 S/F	0632.1	0632.8	4.5	70			
	8800	LEAR	4 S/F	0632.3	0632.8	544.4	34			
	8800	LEAR	8 S	0632.3	0632.8	.8	34			
	8800	ATHN	4 S/F	0632.6	0633.0	20.9	15			
	950	GORK	1 S	0632.7	0632.8	.9	7.0	4.0		
	650	GORK	1 S	0632.8	0633.0	3.2	3.0	1.5		
	2695	LEAR	8 S	0632.8	0632.8	.2	16			
	15400	LEAR	4 S/F	0633.1	0633.6	2.9	15			
	3659	YUNN	47 GB	0709.0	0717	51.0				RIF 130.
	2650	DWIN	45 C	0716.0	0718	30.0	480	200		
	9375	YUNN	45 C	0716.0	0718	16.0				RIF 88.
	10715	DWIN	45 C	0716.0	0718	8.0	370	100		
	1000	TYKW	45 C	0716.0	0718.1	24.0	330	75		
	3750	TYKW	45 C	0716.0	0717.7	14.0	400	65		
	2000	TYKW	47 GB	0716.0	0717.8	24.0	510	80		
	9400	TYKW	45 C	0716.0	0717.4	7.0	330	50		
	5200	BERN	46 C	0716.0	0717.6	37.0	318.0			
	3100	CRIM	47 GB	0716.0	0717.5	15.0	315	105		
	3100	CRIM		0716.0	0719.4		222			
	650	GORK		0716.1	0719.6		66.0			
	650	GORK	46 C	0716.1	0718.0U	11.5	59.0			
	11800	BERN	4 S/F	0716.1	0717.3	9.0	364.0			
	8400	BERN	46 C	0716.1	0717.3	9.0	369.0			
	8800	ATHN	4 S/F	0716.1	0717.3	18.4	330			
	3200	BERN	46 C	0716.1	0717.6	37.0	457.0			
	4995	ATHN	4 S/F	0716.1	0717.6	19.2D	270			
	1415	ATHN	47 GB	0716.1	0717.6	28.4D	520			
	500	HIRA	46 C	0716.2		12.0	150 D			0
	35000	BERN	4 S/F	0716.4	0717.4	5.0	309.0			
	19600	BERN	4 S/F	0716.4	0717.4	9.0	396.0			
	9100	GORK	46 C	0716.4	0717.5	5.9	230.0D			
	9100	GORK		0716.4	0719.4		68.0			
	430	KRAK	47 GB	0716.5	0717.5	13.5	800.0D	20.0		
	3000	IZMI	45 C	0716.5	1717.5	18.5	430	290		
	2950	GORK		0716.5	0719.6		300.0			
	810	KRAK	45 C	0716.5	0718.5	25.0	200.0	48.0		
	2950	GORK	45 C	0716.5	0718.0U	13.8	100.0D			
	810	KRAK		0716.5	0720.0		160.0			
	4995	LEAR	4 S/F	0716.5	0717.6	6.8	290			
	15400	LEAR	8 S	0716.6	0717.5	1.7	270			
	8800	LEAR	4 S/F	0716.6	0717.3	3.5	320			
	1415	LEAR	4 S/F	0716.6	0717.8	20.2	470			
	2695	LEAR	47 GB	0716.6	0717.6	16.2	510			
	950	GORK	3 S	0716.6	0719.6	5.8	254.0			
	606	LEAR	4 S/F	0716.8	0718.0	12.0	139			
	410	LEAR	47 GB	0716.8	0717.3	3.0	1300			
	950	GORK	29 PBI	0722.1	0722.3	29.8	114.0			
	9400	TYKW	30 PBI	0723.0		60.0	12	6		
	650	GORK	29 PBI	0727.6	0727.6	62.4	10.0			
	3750	TYKW	29 PBI	0730.0		60.0	14	5		

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26	3100	CRIM	29	PBI	0731.0	0731.0	19.0	17	6		
	9400	TYKW	20	GRF	0740.0	0753	35.0	6	3		
	1000	TYKW	29	PBI	0740.0		40.0	11	4		
	2000	TYKW	29	PBI	0740.0		60.0	13	4		
	3100	CRIM	31	ABS	0750.0	0936.0		6			
	3100	CRIM	20	GRF	0904.0	0912.0	82.0	3	1		
	2950	GORK	20	GRF	0907.7	1017.0	74.0	5.0	25.0		
	9100	GORK	22	GRF	0937.6	1007.4	30.0E	7.0			
	430	KRAK	8	S	1009.5	1010.0	.5	250.0			
	3100	CRIM	28	PRE	1043.0	1100.0	17.0	8	3		
	8800	ATHN	47	GB	1046.0	1153.6	182.5	10000			
	5200	BERN	47	GB	1053.0	1153.4	250.0	9630.0			
	3200	BERN	47	GB	1053.0	1153.4	250.0	7540.0			
	2650	DWIN	49	GB	1055.0		120.0	500 D			
	10715	DWIN	49	GB	1055.0		120.0	1100 D			
	4995	ATHN	47	GB	1055.3	1153.3	173.2D	7700			
	19600	BERN	47	GB	1057.7	1152.1	190.0	6544.0			
	11800	BERN	47	GB	1057.7	1152.1	220.0	6100.0			
	2800	OTTA	47	GB	1100.0	1154	105.0D	9880.0	2020.0		
	3100	CRIM	47	GB	1100.0	1116.5	120.0D	312	104		
	3100	CRIM			1100.0	1140.8		292			
	3100	CRIM			1100.0	1145.7		2730 U			
	3100	CRIM			1100.0	1208.5		2626 U			
	606	SGMR	47	GB	1102.1	1140.5U	38.4D	380			
	2695	SGMR	47	GB	1102.5	1153.5U	51.0D	5000			
	4995	SGMR	47	GB	1102.5	1153.5U	51.0D	9700			
	3000	IZMI	48	C	1103.0	1116.8	31.0	500	350		
	1415	ATHN	47	GB	1103.1	1154.3	130.4D	1700			
	930	BORD	28	PRE	1104.0	1117.2	36.0	370	85		
	260	ONDR	49	GB	1105.5	1154.5	50.0	71.0	21.0		
	810	KRAK			1107.0	1202.5		720.0			
	810	KRAK			1107.0	1131.7		120.0			
	810	KRAK	49	GB	1107.0	1116.3	90.0	310.0	190.0		
	810	KRAK			1107.0	1157.8		600.0			
	536	ONDR	49	GB	1108.0		113.0	53.0D	36.0		
	808	ONDR	49	GB	1109.6		111.0	110.0D	58.0		
	204	IZMI	20	GRF	1110.0	1132.0	55.0	175	50		
	430	KRAK			1111.0	1131.5		330.0			
	430	KRAK			1111.0	1157.7			100.0		
	430	KRAK			1111.0	1148.5		200.0			
	430	KRAK	45	C	1111.0	1116.3	79.5	260.0	57.0		
	228	HARS	47	GB	1115.0	1130.0	45.0	65	25		
	33	UPIC	41	F	1128.2	1142.2	54.8				
	127	TORN	27	RF	1128.3		23.0		280		
	29	UPIC	41	F	1128.6	1149.8	56.4				
	3000	IZMI	47	GB	1134.0		51.0	12500 D	9000		
	930	BORD	47	GB	1140.0	1202	86.0	1180	550		
	35000	BERN	47	GB	1142.3	1156.1	80.0	2825.0			
	930	BORD	29	PBI	1230.0	1230	37.0	50	15		
	2800	OTTA	30	PBI	1245.0	1245	210.0	92.0	29.2		
	2800	OTTA	1	S	1432.0	1432.5	1.0	3.0	1.4		
	245	PALE	8	S	1702.8	1702.8	.2	180			
	8400	BERN	4	S/F	1735.4	1739.5	9.0U	200.0			
	15400	SGMR	4	S/F	1735.6	1739.3	8.2D	410			
	11800	BERN	4	S/F	1736.0	1739.4	8.0U	188.0			
	8800	PALE	4	S/F	1736.6	1739.3	7.0	400			
	19600	BERN	4	S/F	1737.2	1739.4	8.0U	184.0			
	5200	BERN	4	S/F	1737.2	1739.5	8.0	117.0			
	3200	BERN	4	S/F	1737.2	1739.5	8.0	21.0			
	4995	SGMR	4	S/F	1737.6	1739.6	5.5D	180			
	4995	PALE	4	S/F	1737.8	1739.3	5.8	130			
	2800	OTTA	21	GRF	1738.0	1758	65.0	13.2	4.4		
	2695	SGMR	4	S/F	1738.5	1739.1	4.6D	08			
	2800	OTTA	1	S	1739.0	1739.6	4.0	6.6	2.2		
	4995	SGMR	4	S/F	1748.8	1751.8	8.3D	100			
	2800	OTTA	4	S/F	1749.0	1751.7	6.0	39.6	13.2		
	2695	SGMR	4	S/F	1749.1	1751.3	6.2D	139			
	15400	SGMR	4	S/F	1750.3	1751.6	7.3	72			
	2695	PALE	4	S/F	1750.5	1751.3	2.8	200			
	4995	PALE	4	S/F	1750.5	1751.8	4.1	95			
	8800	PALE	4	S/F	1750.5	1751.6	5.5	200			
	15400	PALE	4	S/F	1750.6	1751.6	3.7	100			
	2800	OTTA	2	S/F	1758.0	1758.2	2.0	8.8	4.4		
	245	PALE	8	S	1902.3	1902.3	.5	30			
	2800	OTTA	21	GRF	1910.0	1929	50.0	9.6	4.8		
	2800	OTTA	4	S/F	1910.0	1913.6	5.0	30.8	13.2		
	2695	PALE	47	GB	1910.3	1913.8	4.2	50			
	606	PALE	47	GB	1911.6	1912.6	1.2	16			
	1415	PALE	8	S	1912.6	1913.8	.2	15			
	2800	OTTA	1	S	1917.5	1918.3	2.5	6.6	3.3		
	4995	PALE	8	S	1917.8	1918.3	.7	22			
	2800	OTTA	1	S	1923.9	1924	2.0	3.6	1.8		
	2695	PALE	8	S	1942.6	1942.8	.4	16			
	8800	PALE	8	S	1942.6	1942.8	.4	25			
	4995	PALE	8	S	1942.6	1942.8	.4	20			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
26	2695	PENT	1	S	2007.0	2008	2.0	8.2	6.0		
	4995	PALE	4	S/F	2007.3	2007.6	3.7	35			
	2695	PALE	8	S	2007.3	2007.8	1.5	13			
	2800	OTTA	29	PBI	2009.0	2009	30.0	6.6	3.6		
	410	PALE	8	S	2028.1	2028.3	.7	30			
	3750	TYKW	21	GRF	2220.0	2325	200.0	2.5	1		
	9400	TYKW	21	GRF	2220.0	2313	70.0	4	2		
	9400	TYKW	5	S	2238.0	2240.3	12.0	12	3		
	17000	NOBE	1	S	2239.8	2240.3	3.0	15			L
	3750	TYKW	5	S	2348.0	2348.8	2.5	1.5	.5		
27	9400	TYKW	20	GRF	0008.6	0031	60.0	10	4		
	2000	TYKW	20	GRF	0010.0	0031	60.0	2	1		
	3750	TYKW	45	C	0010.0	0031	60.0	11	4		
	2695	PENT	20	GRF	0010.0	0032	60.0	7.4	3.4		
	9400	TYKW	5	S	0118.0	0123	25.0	3	1.5		
	606	LEAR	8	S	0155.6	0155.8	.2	06			
	410	LEAR	8	S	0155.6	0155.8	.2	130			
	9400	TYKW	5	S	0210.5	0211.0	3.0	10	3		
	3750	TYKW	21	GRF	0220.0	0250	280.0	6	3		
	2000	TYKW	21	GRF	0230.0	0445	280.0	5	2.5		
	3750	TYKW	5	S	0239.0	0240.5	5.0	4	1.5		
	2000	TYKW	5	S	0302.0	0302.2	.7	3	1		
	3659	YUNN			0311.0	0326					RIF 5.3
	3659	YUNN	41	F	0311.0	0331	22.0				RIF 5.3
	3659	YUNN			0311.0	0312					RIF 3.
	3750	TYKW	45	C	0323.0	0331.4	12.0	11	4		
	3750	TYKW	29	PBI	0335.0		25.0	4	2		
	9400	TYKW	45	C	0400.0	0416.5	20.0	8	2		
	1000	TYKW	45	C	0400.0	0400.6	1.0	19	3		
	410	LEAR	8	S	0400.3	0400.5	.5	21			
	9100	GORK	23	GRF	0410.0E	0851.0	413.0D	200.0			
	2950	GORK	20	GRF	0411.0E	0420.5	124.0D	6.0	3.0		
	3750	TYKW	21	GRF	0415.0	0520	150.0	6	3		
	3750	TYKW	5	S	0418.0	0420	5.0	2.5	1		
	9400	TYKW	31	ABS	0420.0	0435	52.0	-8	-5		
	3750	TYKW	45	C	0430.0	0443.3	30.0	8	2		
	4995	LEAR	4	S/F	0442.8	0443.1	3.3	11			
	9400	TYKW	45	C	0512.6	0514.0	12.0	17	3		
	8800	LEAR	4	S/F	0512.1	0514.1	2.7	25			
	15400	LEAR	4	S/F	0513.3	0514.0	2.8	51			
	17000	NOBE	1	S	0513.5	0514.0	3.0	39			L
	9375	YUNN	2	S/F	0710.0	0711.5	2.5				RIF 8.
	9400	TYKW	28	PRE	0716.0	0725.5	23.0	16	9		
	6100	KISV			0717.0	0817.3		1310			
	6100	KISV			0717.0	0913.4		110			
	6100	KISV			0717.0	0811.5		1500			
	6100	KISV			0717.0	0803		540			
	6100	KISV			0717.0	0808.6		1520			
	6100	KISV			0717.0	0757.6		280			
	6100	KISV			0717.0	0831.5		670			
	6100	KISV			0717.0	0841.3		290			
	6100	KISV			0717.0	0820.3		1160			
	6100	KISV	47	GB	0717.0	0813.7		1560			
	930	BORD	8	S	0717.6	0717.6	.1	15	1		
	245	LEAR	8	S	0727.8	0727.8	.8	110			
	3750	TYKW	28	PRE	0728.0	0743	15.0	6	2		
	17000	NOBE	28	PRE	0732.3	0750.8	18.3	39			L
	3100	CRIM	28	PRE	0736.0	0748.0	12.0	23	7		
	8800	ATHN	47	GB	0738.8	0813.3	291.2	11000			
	9400	TYKW	47	GB	0739.0	0813.5	81.0	13000	2000		
	9375	YUNN	47	GB	0741.0	0823	119.0				RIF 433.
	4995	ATHN	47	GB	0741.6	0813.6	182.4D	4500			
	9100	GORK	47		0741.7	0813.5	69.0	10450.0			
	5730	IRKU			0743.0	0811.3		3630			R
	5730	IRKU			0743.6	0804.5		1220			R
	5730	IRKU			0743.0	0818.3		2880			R
	5730	IRKU			0743.0	0814.0		3740			R
	5730	IRKU			0743.0	0831.8		880			R
	5730	IRKU			0743.0	0824.0		1270			R
	5730	IRKU			0743.0	0759.8	342.0				R
	5730	IRKU			0743.0	0841.6		300			R
	5730	IRKU			0743.0	0807.9		3080			R
	5730	IRKU	49	GB	0743.0	0757.7	46.0	250			R
	5730	IRKU			0743.0	0803.0		490			R
	3750	TYKW	47	GB	0743.0	0811.5	77.0	5250	950		
	2950	GORK	47	GB	0744.7	0809.0	175.0	1000.0			
	3000	IZMI	48	C	0745.0	0809.0	70.0	2600	1200		
	2000	TYKW	47	GB	0745.0	0808.7	75.0	2100	400		
	2650	DWIN	49	GB	0745.0		120.0	500 D			
	2695	ATHN	47	GB	0745.5	0809.0	180.5D	3500			
	10715	DWIN	49	GB	0748.0		110.0	1100 D			
	3100	CRIM			0748.0	0831.5		461			
	3100	CRIM			0748.0	0841.5		188			
	3100	CRIM	47	GB	0748.0	0808.5	180.0	3024 U			

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27	1415	ATHN	47 GB	0749.6	0812.1	174.4D	30			
	536	ONDR	48 C	0750.0		69.0	56.0D	16.0		
	810	KRAK	42 SER	0750.5	0750.5	.8	41.0			
	17000	NOBE	45 C	0750.8	0757.5	7.5D	581			L
	19600	BERN	47 GB	0752.0	0813.4	180.0U	8300.0			
	3200	BERN	47 GB	0752.0	0808.9	200.0U	2800.0			
	11800	BERN	47 GB	0752.0	0808.3	200.0U	7340.0			
	5200	BERN	47 GB	0752.0	0813.6	300.0U	5980.0			
	606	LEAR	8 S	0752.3	0752.5	.8	110			
	1000	TYKW	45 C	0753.0	0814.1	45.0D	400	130 D		
	430	KRAK	8	0756.0	0756.0	.1	48.0			
	930	BORD	45 C	0756.0	0805.6	58.0	588	105		
	260	ONDR		0756.0	0841.2		42.0			
	260	ONDR		0756.0	0914		54.0			
	808	ONDR	48 C	0756.6		64.0	105.0D	36.0		
	260	ONDR	49 GB	0756.0	0808.2	103.0	199.0	18.0		
	650	GORK	47 GB	0756.2	0805.6	23.5	2050.0			
	650	GORK		0756.2	0807.8		2080.0			
	950	GORK	46 C	0757.0	0805.5	38.5	590.0			
	950	GORK		0757.0	0808.6		412.0			
	950	GORK		0757.0	0814.0		396.0			
	35000	NAGO	47 GB	0757.0	0814	33.0D	2600 U			SUNSET
	35000	BERN	47 GB	0757.2	0808.0	75.0U	14232.0			
	500	HIRA	48 C	0758.0	0807.4	50.0	1600	300		0
	810	KRAK	49 GB	0758.5	0804.5	57.5	1100.0D	110.0		
	430	KRAK		0758.5	0842.7		230.0			
	810	KRAK		0758.5	0813.5		340.0			
	430	KRAK	49 GB	0758.5	0807 U	61.0	800.0D	100.0U		
	200	GORK		0800.0	0816.5		85.0			
	200	GORK	46 C	0800.0	0807.9	25.4	230.0			
	200	HIRA	46 C	0801.0	0807.9	30.0	190	30		0
	204	IZMI	20 GRF	0802.0	0806.5	25.0	250	70		
	100	HIRA	46 C	0802.5	0807.6	30.0	360	75		0
	228	HARS	47 GB	0803.8	0808.2	15.2	110	45		
	100	GORK		0804.0	0800.0		570.0			
	100	GORK	46 C	0804.0	0806.8	15.3	220.0			
	127	TORN	27 RF	0806.9	0817.9	19.0	80	2		
	29	UPIC	48 C	0812.3	0828.4	25.0				
	33	UPIC	48 C	0812.5	0833.6	24.0				
	650	GORK	30 PBI	0819.7	0819.7	157.3	20.0			
	950	GORK	29 PBI	0835.4	0835.5	130.0	20.0			
	245	LEAR	4 S/F	0839.6	0839.1	6.1D	23			
	410	LEAR	4 S/F	0839.3	0841.8	10.3	93			
	650	GORK		0839.4	0843.9		64.0			
	650	GORK	46 C	0839.4	0842.0	8.6	94.0			
	606	LEAR	4 S/F	0839.5	0840.8	9.3	180			
	200	GORK	2 S/F	0840.0	0842.0	5.2	5.0	2.5		
	5730	IRKU	30 PBI	0844.0	0913.5	60.0D	210			R
	3100	CRIM	30 PBI	0851.0	0851.0		66			
	930	BORD	PBI	0854.0	0922.3	90.0	47	10		
	3750	TYKW	29 PBI	0900.0		10.0D	55	52 D		
	9400	TYKW	29 PBI	0900.0		10.0D	130	120 D		
	2000	TYKW	29 PBI	0900.0		10.0D	22	18 D		
	200	GORK		0900.2	0923.5		35.0			
	200	GORK		0900.2	0927.6		25.0			
	200	GORK	46 C	0900.2	0914.5	38.4	15.0			
	808	ONDR	41 F	0903.0	0921.8	98.0	40.0	13.0		
	536	ONDR	41 F	0904.0	0914	126.0	18.0	7.0		
	810	KRAK	29 PBI	0905.5	0920.0	77.0	25.0	6.0		
	1415	LEAR	4 S/F	0905.6	0922.0	27.5	61			
	410	LEAR	4 S/F	0906.1	0914.0	17.0	79			
	430	KRAK	45 C	0906.3	0913.5	29.0	110.0	19.0		
	127	TORN	40 F	0907.0	0946.9	42.0	20	8		
	9100	GORK	4 S/F	0909.0	0910.3	6.7	88.0			
	245	LEAR	4 S/F	0909.5	0914.5	18.1	23			
	3100	CRIM	1 S	0911.2	0913.2	4.0	31	10		
	204	IZMI	25 R	0912.0	0923.5	23.0	45	20		
	3100	CRIM	1 S	0928.5	0930.5	4.0	14	5		
	810	KRAK	8 S	1039.5	1039.5	.2	7.0			
	808	ONDR	42 SER	1118.0	1222.6	159.0	121.0			
	2800	OTTA	21 GRF	1130.0	1350	480.0	16.6			
	9100	GORK	20 GRF	1136.0	1157.0	24.0E	9.0			
	536	ONDR	42 SER	1140.0	1140	68.0	48.0			
	204	IZMI	41 F	1140.8	1140.8	1.3	200			
	930	BORD	41 F	1143.4	1143.5	.2	65	2		
	33	UPIC	8 S	1151.6	1151.6	.3				
	29	UPIC	3 S	1152.0	1152.1	.3				
	930	BORD	41 F	1424.0	1424.4	.5	30	2		
	2800	OTTA	1 S	1858.0	1859	6.0	8.4	2.8		
	4995	PALE	8 S	1858.3	1858.8	1.5	19			
	2800	OTTA	1 S	1952.0	1956	9.0	2.6	1.4		
	410	PALE	8 S	2008.5	2008.6	.1	200			
	3750	TYKW	28 PRE	2228.0	2229.2	24.0	3	1.5		
	9400	TYKW	5 S	2228.5	2229.2	4.0	6	2		
	9400	TYKW	47 GB	2251.7	2252.5	18.3	4450	800		

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27	8800	PALE	47 GB	2251.8	2252.3	35.0	6100			
	4995	PALE	47 GB	2252.0	2254.6	34.8	4600			
	15400	PALE	47 GB	2252.0	2254.6	15.1	2300			
	2695	PENT	47 GB	2252.0	2255.2	24.0	1915.0	564.0		
	8800	MANI	47 GB	2252.0	2252.5	129.3D	6200			
	1000	TYKW	45 C	2252.0	2255.8	18.0	495	40		
	2000	TYKW	47 GB	2252.0	2255.9	28.0	900	200		
	3750	TYKW	47 GB	2252.0	2255.0	28.0	3250	550		
	17000	NOBE	45 C	2252.0						
	2695	PALE	47 GB	2252.1	2255.1	34.7	1800			
	1415	PALE	47 GB	2252.3	2255.8	23.3	320			
	1415	MANI	4 S/F	2252.6	2256.3	21.0D	190			
	4995	LEAR	47 GB	2258.0E	2258.0	18.1D	4800			
	8800	LEAR	47 GB	2258.0E	2258.0	5.3D	3000			
	15400	LEAR	47 GB	2258.0E	2258.0	.8D	770			
	1415	LEAR	4 S/F	2258.0E	2258.0	8.1D	280			
	2695	LEAR	47 GB	2258.0E	2258.0	32.1D	1800			
	9400	TYKW	29 PBI	2310.6		170.0	40	20		
	1000	TYKW	29 PBI	2310.0		60.0	8	3		
	3750	TYKW	29 PBI	2320.0		150.0	45	20		
	2000	TYKW	29 PBI	2320.0		150.0	31	12		
	2695	PENT	29 PBI	2323.0	2323	140.0	38.8	18.0		
28	208	VORO	43 NS	2355.0	0023	68.0D	33	13		
	35000	NAGO	20 GRF	0020.0	0050	95.0	11			
	3750	TYKW	5 S	0234.0	0236	6.0	4	1.5		
	2000	TYKW	20 GRF	0400.0	0413	100.0	2	1		
	3750	TYKW	20 GRF	0400.0	0432	110.0	6	2.5		
	3750	TYKW	20 GRF	0700.0	0730	100.0	3	1.5		
	2000	TYKW	20 GRF	0700.0	0710	100.0	3	1.5		
	245	LEAR	8 S	0720.1	0720.1	1.0	75			
	930	BORD	46 C	0729.0	0729.6	1.0	23	3		
	127	TORN	7 C	0842.4	0843.3	2.0	40	20		
	6100	KISV	27 RF	0906.0	0912.5	14.0	2			
	930	BORD	8 S	0917.8	0917.9	.3	17	2		
	3100	CRIM	26 FAL	0944.0	1124.0		5			
	3100	CRIM	20 GRF	1052.0	1053.5	9.0	5	2		
	2950	GORK	20 GRF	1052.3	1053.4	19.0	7.0	3.5		
	260	ONDR	42 SER	1059.0	1208.7	248.0	74.0			
	536	ONDR	42 SER	1134.0		152.0	67.0D			
	2800	OTTA	21 GRF	1640.0	1648	26.0	15.8	9.0		
	2800	OTTA	45 C	1649.5	1651.7	8.0	13.2	6.0		
	606	SGMR	4 S/F	1738.0	1833.0	82.0D	37			
	2800	OTTA	22 GRF	1745.0	1834	125.0	100.0	39.0		
	2695	SGMR	4 S/F	1758.5	1833.6	61.5D	110			
	1415	SGMR	4 S/F	1758.5	1833.6	61.5D	92			
	8800	PALE	4 S/F	1759.6	1842.1	63.0	39			
	4995	PALE	4 S/F	1759.6	1839.3	67.5	54			
	2695	PALE	4 S/F	1759.6	1836.5	73.0	100			
	1415	PALE	4 S/F	1759.6	1835.5	73.2	08			
	15400	PALE	4 S/F	1759.6	1821.8	63.4	18			
	606	PALE	4 S/F	1759.6	1832.6	52.2	22			
	4995	SGMR	4 S/F	1801.1	1837.5	58.9D	55			
	8800	SGMR	4 S/F	1803.0	1837.3	57.0D	26			
	2800	OTTA	47 GB	2103.0	2118.5	47.0	715.0	270.0		
	1000	TYKW	45 C	2103.0	2110.2	44.0	81	35		
	2000	TYKW	45 C	2103.0	2119.4	46.0	460	180		
	3750	TYKW	47 GB	2104.0	2118.4	45.0	680	240		
	2695	PALE	47 GB	2104.3	2118.3	39.8	640			
	1415	PALE	47 GB	2104.6	2131.1	37.0	190			
	4995	PALE	47 GB	2105.3	2118.3	38.0	530			
	8800	PALE	47 GB	2106.8	2118.5	37.2	390			
	9400	TYKW	45 C	2107.0E	2118.5	37.0D	345	135	D	RAIN
	606	PALE	47 GB	2109.0	2109.3	2.0	16			
	15400	PALE	47 GB	2110.0	2118.6	27.3	150			
	245	PALE	47 GB	2114.8	2115.3	8.2	23			
	9400	TYKW	30 PBI	2147.0		310.0	28	14		
	1000	TYKW	5 S	2148.0	2155	16.0	9	4		
	3750	TYKW	30 PBI	2149.0		600.0	22	10		
	2000	TYKW	30 PBI	2149.0		360.0	8	4		
	2000	TYKW	5 S	2150.0	2155	14.0	15	8		
	35000	NAGO	20 GRF	2150.6U	2310	140.0U	21			SUNRISE
	2800	OTTA	30 PBI	2150.0	2150	240.0D	20.0			
	2800	OTTA	20 GRF	2151.0	2155	13.0	10.8	6.6		
	3750	TYKW	5 S	2151.0	2155	15.0	6	3		
	2000	TYKW	5 S	2205.0	2223	80.0	132	40		
	1000	TYKW	45 C	2206.0	2223.6	80.0	67	24		
	3750	TYKW	5 S	2207.0	2223	80.0	85	25		
	2800	OTTA	3 S	2207.0	2223	70.0	148.0	51.0		
	606	PALE	47 GB	2207.8	2209.3	5.5	26			
	9400	TYKW	20 GRF	2208.0	2222	40.0	25	10		
	2695	PALE	47 GB	2212.1	2223.5	35.9	110			
	1415	PALE	47 GB	2212.5	2223.5	35.8	89			
	4995	PALE	47 GB	2213.0	2221.8	22.1	50			
	8800	PALE	47 GB	2214.3	2221.8	15.8	32			

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28	15400	PALE	47 GB	2217.3	2217.3	1.5	20			
	2930	VORO	47 GB	2250.0	2257	30.0	1301			
	1000	TYKW	47 GB	2335.0	0207.9	170.0	525	34		
	410	LEAR	8 S	2345.1	2345.1	.2	20			
	410	LEAR	4 S/F	2346.8	2348.8	12.3	43			
	2000	TYKW	5 S	2347.0	2347.8	2.0	9	2.5		
	410	PALE	8 S	2347.6	2348.8	1.5	37			
	3750	TYKW	20 GRF	2350.0	0030	130.0	4	2		
	2000	TYKW	45 C	2350.0	2410.3	180.0	140	8		
	2695	PENT	40 F	2356.0	0010.2	24.0	48.0			
	410	PALE	8 S	2358.3	2358.6	.7	18			
29	245	LEAR	43 NS	0003.5	0023.8	36.6	30			
	410	LEAR	43 NS	0004.8	0058.5	54.7	13			
	100	HIRA	43 NS	0010.0	0258	230.0D	25	5		0
	606	LEAR	43 NS	0025.0	0139.5	105.1	56			
	2695	LEAR	4 S/F	0003.1	0010.3	7.7	37			
	245	PALE	8 S	0005.3	0005.5	.3	21			
	410	PALE	8 S	0005.5	0006.0	.1	13			
	245	PALE	4 S/F	0011.1	0013.8	5.5	28			
	410	PALE	8 S	0015.6	0015.8	1.0	13			
	245	LEAR	8 S	0019.0	0020.3	1.6	75			
	410	LEAR	8 S	0020.1	0020.1	.2	33			
	606	LEAR	8 S	0022.5	0022.8	.1	24			
	1415	LEAR	8 S	0026.3	0026.6	1.3	22			
	606	LEAR	4 S/F	0035.1	0037.3	14.0	84			
	606	PALE	4 S/F	0036.1	0037.1	12.9	83			
	1415	LEAR	4 S/F	0040.1	0042.8	8.0	21			
	1415	PALE	4 S/F	0044.0	0044.3	4.1	17			
	606	PALE	4 S/F	0049.6	0050.5	2.2	38			
	2695	PENT	40 F	0052.0	0121	57.0	36.0			
	1415	LEAR	47 GB	0103.8	0108.3	5.3	110			
	2695	LEAR	8 S	0107.6	0107.6	.2	17			
	1415	PALE	8 S	0108.1	0108.3	.5	87			
	606	LEAR	4 S/F	0120.3	0125.5	8.8	119			
	1415	LEAR	8 S	0124.3	0125.3	1.5	24			
	606	PALE	47 GB	0132.8	0139.3	17.0	81			
	606	LEAR	4 S/F	0229.3	0729.8	293.7	21			
	1000	TYKW	5 S	0545.0	0545.2	.5	11	3		
	2950	GORK	20 GRF	0548.2	0554.0	14.5	3.0	1.5		
	260	ONDR	42 SER	0607.0	0729.6	253.0	111.0			
	245	LEAR	8 S	0712.8	0713.1	.3	95			
	810	KRAK	8 S	0714.5	0714.5	.1	7.0			
	245	LEAR	4 S/F	0727.8	0729.6	2.2	110			
	950	GORK	4 S/F	0727.9	0729.7	3.0	14.0			
	200	GORK	2 S/F	0727.9	0729.6	2.1	40.0D			
	650	GORK	4 S/F	0728.0	0729.7	2.0	13.0	2.0		
	204	IZMI	41 F	0728.6	0729.8	2.0	175	100		
	2950	GORK	1 S	0729.0	0729.5	.8	4.0	2.0		
	100	GORK	4 S/F	0729.0	0729.7	1.2	160.0			
	1000	TYKW	5 S	0729.0	0729.7	1.0	11	4		
	410	LEAR	8 S	0729.3	0729.5	.7	49			
	810	KRAK	1 S	0729.3	0729.5	.7	14.0	4.0		
	430	KRAK	8 S	0729.5	0729.7	.5	110.0			
	2950	GORK	1 S	0942.0	0942.1	1.0	4.0	2.0		
	810	KRAK	8 S	0942.0	0942.0	.2	7.0			
	930	BORD	41 F	0942.0	0942.2	.8	14	3		
	33	UPIC	3 S	0942.1	0942.3	.3				
	29	UPIC	3 S	0942.5	0942.7	.3				
	930	BORD	8 S	1002.6	1002.8	.4	33	2		
	536	ONDR	42 SER	1056.5	1402.3	186.0	57.0			
	930	BORD	41 F	1208.5	1208.7	.3	24	2		
	2800	OTTA	40 F	1326.9	1328.3	7.0	17.0			
	930	BORD	41 F	1400.6	1401	.4	16	2		
	245	SGMR	8 S	1908.3	1908.6	.7D	34			
	606	SGMR	8 S	1908.3	1908.5	.5D	44			
	1415	SGMR	8 S	1908.5	1908.6	.3	13			
	2800	OTTA	20 GRF	1920.0	1935	35.0	1.8	.9		
	2000	TYKW		2350.0	0124.5		65			
30	3750	TYKW	20 GRF	0115.0	0130	45.0	2	1		
	245	LEAR	4 S/F	0115.6	0116.3	2.9	51			
	3750	TYKW	21 GRF	0207.0	0335	175.0	8	3		
	9400	TYKW	20 GRF	0210.0	0325	170.0	17	6		
	245	LEAR	4 S/F	0242.5	0245.1	4.5	38			
	2000	TYKW	21 GRF	0249.0	0335	100.0	4	2		
	2000	TYKW	45 C	0258.0	0313.8	23.0	32	7	D	
	1415	LEAR	47 GB	0300.3	0313.8	19.0	130			
	208	VORO		0302.0	0323		220			
	208	VORO	48 C	0302.0	0315	37.0	500	D		
	410	LEAR	47 GB	0302.8	0314.0	26.8	840			
	8800	LEAR	4 S/F	0302.8	0322.0	28.2	13			
	1000	TYKW	45 C	0303.0E	0313.9	20.0D	325	30	D	
	3750	TYKW	45 C	0303.0	0307.8	15.0	8	2.5		
	500	HIRA	46 C	0303.0	0313.6	34.0	900	50		0

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1981

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
30	2695	LEAR	4 S/F	0303.8	0304.6	11.8	16			
	606	LEAR	47 GB	0303.8	0313.8	18.0	1399			
	200	HIRA	46 C	0304.2	0316	34.0	490	49		0
	200	HIRA		0304.2	0309.3		34			0
	200	HIRA		0304.2	0322.8		140			0
	4995	LEAR	4 S/F	0305.5	0309.3	12.6	07			
	100	HIRA	48 C	0305.6	0314.1	41.0	8500	510		WR
	245	LEAR	47 GB	0305.8	0315.0	24.7	820			
	15400	LEAR	4 S/F	0306.5	0322.1	24.6	15			
	1000	TYKW	29 PBI	0323.0		70.0	6	2		
	245	LEAR	8 S	0450.1	0450.3	.5	48			
	245	LEAR	4 S/F	0513.8	0515.1	2.5	45			
	606	LEAR	8 S	0514.3	0515.3	1.7	11			
	410	LEAR	8 S	0514.8	0515.5	.8	07			
	3659	YUNN	20 GRF	0542.0	0550	14.0				RIF 6.
	245	LEAR	4 S/F	0546.3	0549.3	3.7	470			
	606	LEAR	4 S/F	0547.3	0547.8	2.7	25			
	410	LEAR	4 S/F	0547.3	0549.3	2.7	20			
	3750	TYKW	5 S	0548.0	0550	5.0	3	1		
	9400	TYKW	5 S	0658.5	0659.5	2.0	4	1.5		
	2000	TYKW	5 S	0659.0	0659.3	1.0	3	1		
	3750	TYKW	5 S	0659.0	0659.8	4.0	3	1		
	9100	GORK	1 S	0659.0U	0659.4	1.3U	5.0	2.5		
	2950	GORK	1 S	0659.1	0659.3	.9	1.0			
	245	LEAR	8 S	0704.8	0704.8	.3	77			
	260	ONDR	42 SER	1013.5	1341.3	150.0	168.0			
	127	TORN	42 SER	1026.4	1028.9	4.7	20			
	2800	OTTA	1 S	1218.0	1220.5	4.0	2.8	1.4		
	536	ONDR	8 S	1324.3	1324.3	.2	156.0			
	228	HARS	45 C	1340.4	1340.8	2.0	380	125		
	2695	PENT	240 R	2040.0	2240	120.0	3.8	1.9		

Reports are received routinely from the following observatories:

ATHN = Athens
BERN = Berne
BORD = Bordeaux
CRIM = Crimea
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Izmiran
KISV = Kislovodsk
KRAK = Krakow
LEAR = Learmonth
MANI = Manila
NAGO = Nagoya
NOBE = Nobeyama
ONDR = Ondrejov
OTTA = Ottawa
PALE = Palehua
PEKG = Peking
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SYDN = Sydney
TORN = Torun
TYKW = Toyokawa
YUNN = Yunnan
TRST = Trieste
UPIC = Upice
VORO = Voroshilov

Explanation of Type Code:

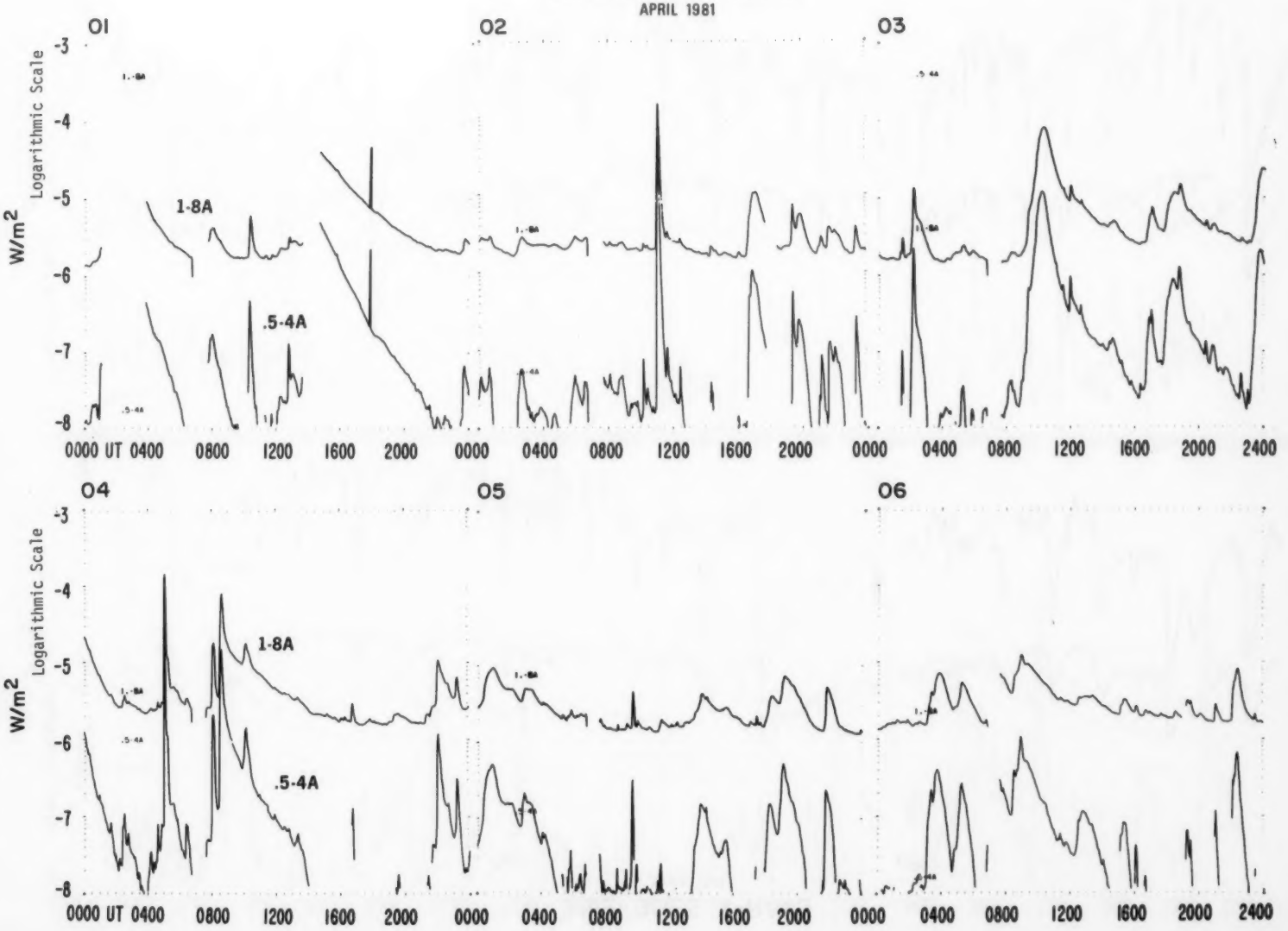
1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

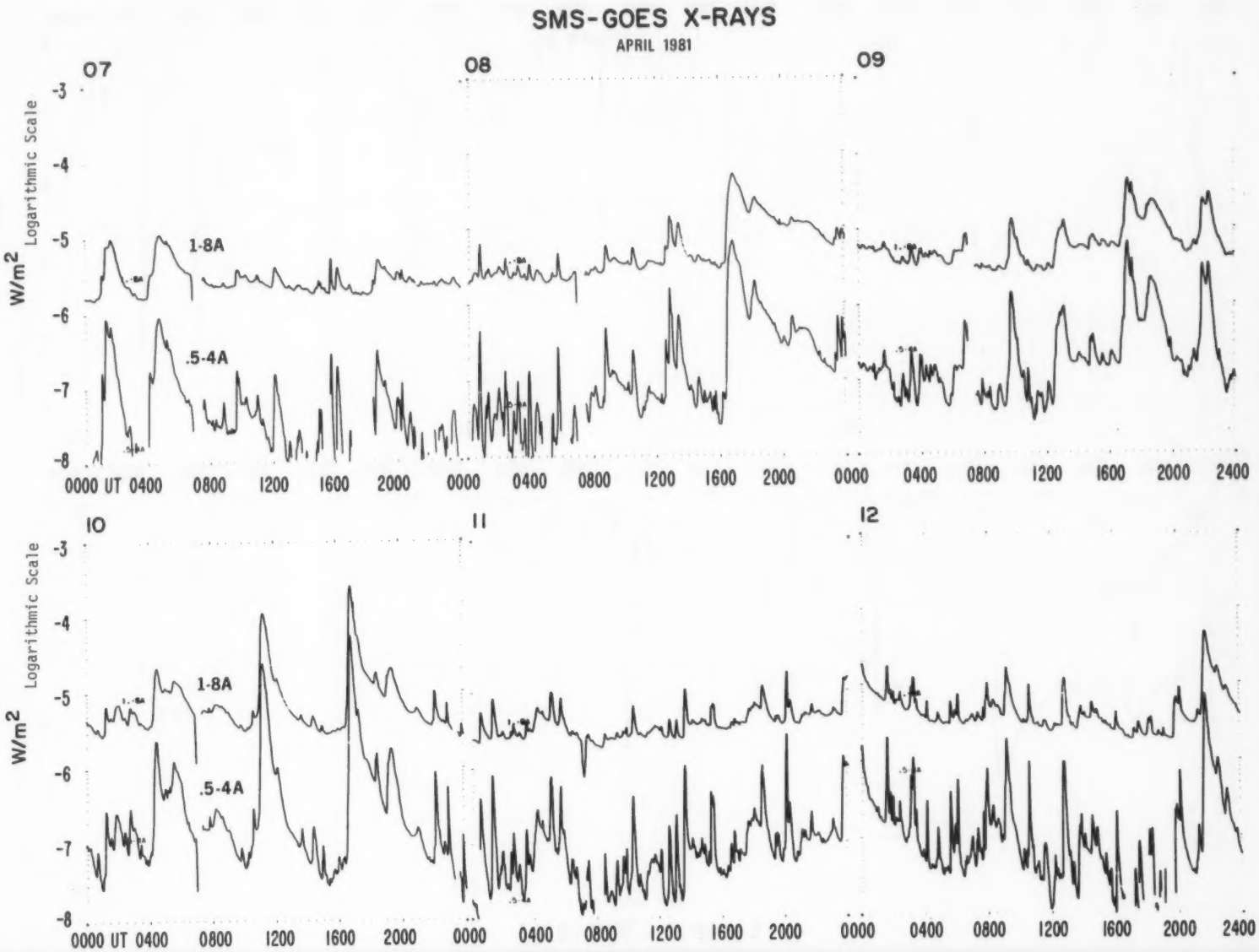
1A Simple 1A
2A Simple 1AF
3A Simple 2A
4A Simple 2AF
21A Simple 3A GRF
240 Rise only
240F Rise only F
24P Post Rise
24PF Post Rise F
26A Fall A
260 Fall Only
26F Fall F
27F Rise and Fall F
27AF Rise and Fall AF
31A P.B. Decrease A
32A Absorption A
46F Complex F

Under the "Remarks" column heading, RIF stands for Relative Increase in Flux. The expression "RIF 469.2", for example, denotes a flux increase of 469.2% above background.

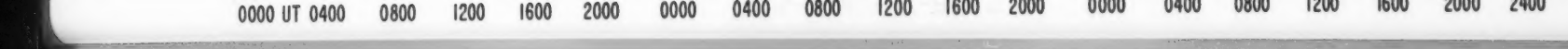
SMS-GOES X-RAYS

APRIL 1981



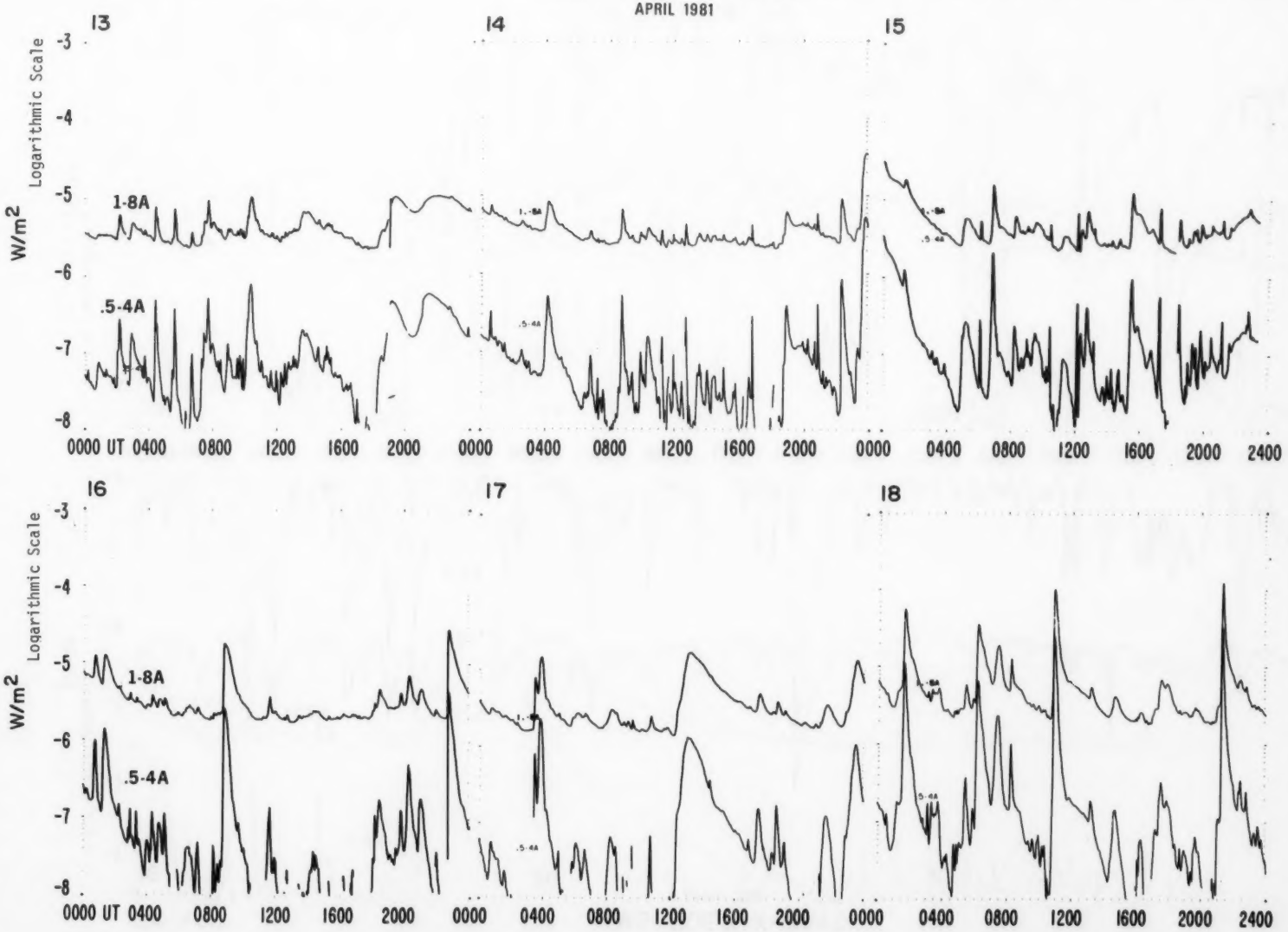


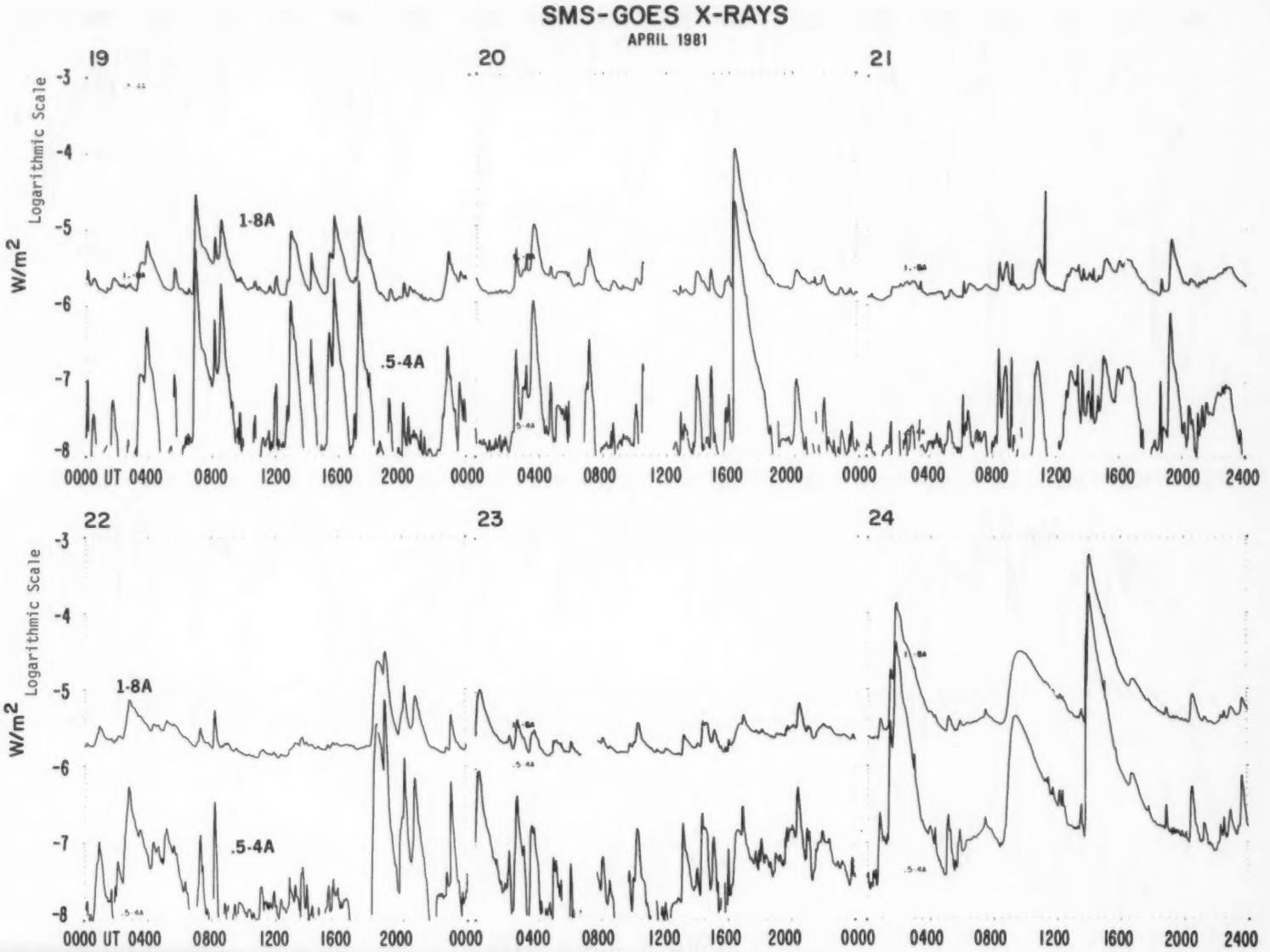
SMS-GOES X-RAYS
APRIL 1981



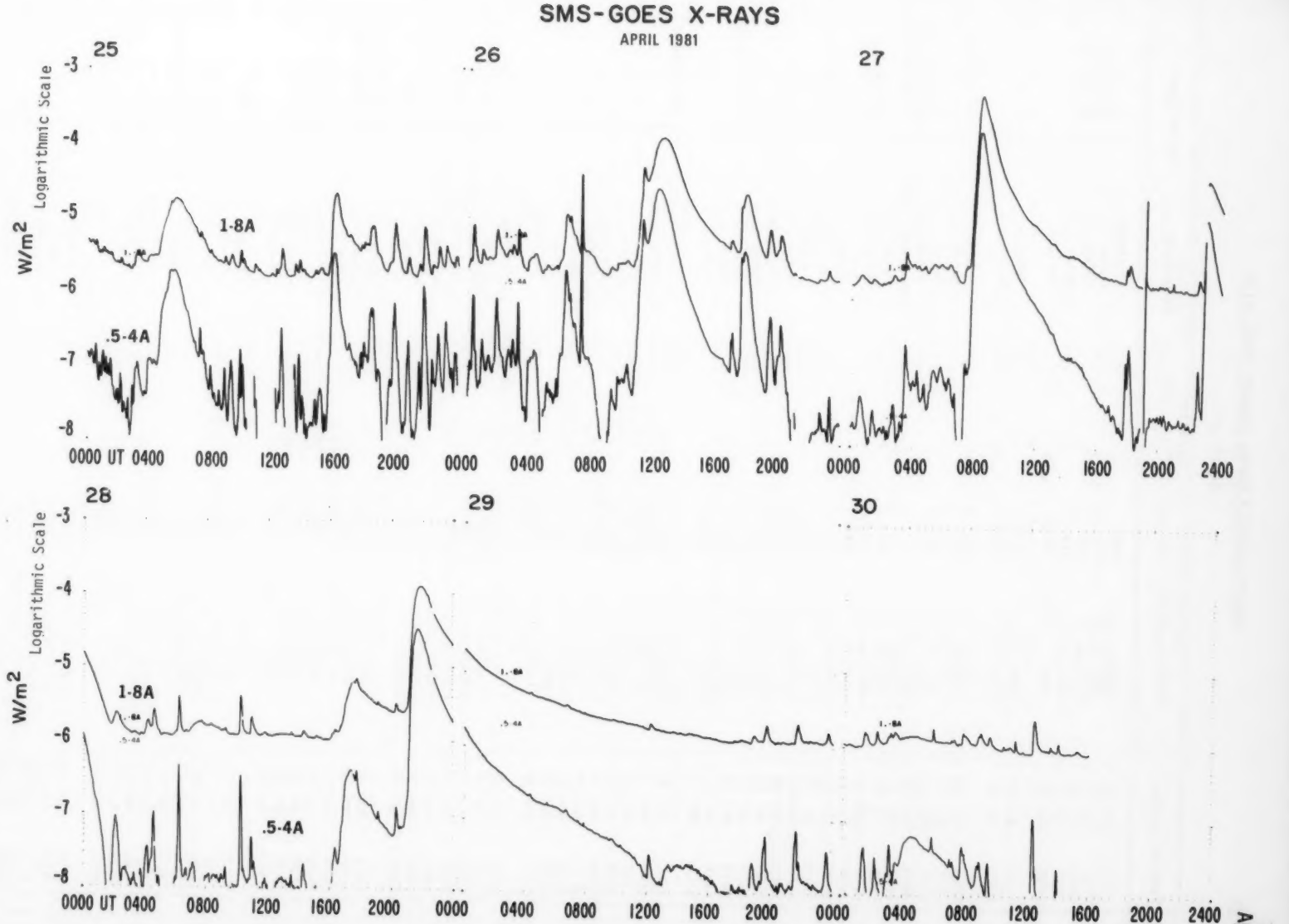
SMS-GOES X-RAYS

APRIL 1981




SMS-GOES X-RAYS
APRIL 1981
19
20
21
22
23
24
W/m2
Logarithmic Scale
-3
-4
-5
-6
-7
-8
1-8A
.5-4A
0000 UT
0400
0800
1200
1600
2000
2400

SMS-GOES X-RAYS
APRIL 1981
25
26


SMS-GOES X-RAYS
APRIL 1981
25
26
27
28
29
30
Logarithmic Scale
W/m2
1-8A
.5-4A
-3
-4
-5
-6
-7
-8
0000 UT 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 2400
0000 UT 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 2400

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Apr 81

MASS EJECTIONS FROM THE SUN

April 1981

Station	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Wavelength	Type of Event
CULG	Apr 01	0119		0230			Decimeter	IV
CULG	Apr 01	0133		0322.5			Meter	IV Structure
CULG	Apr 01	0137.5		0157.5			Meter	II Herringbone
LEAR	Apr 01	0137.7		0143.8			Meter	II
WEND	Apr 01	1452	1544	1655D	282	1.00	H-alpha	A
CULG	Apr 02	2142		2158			Meter	II
HARV	Apr 02	2143		2154			Meter	II
CULG	Apr 03	0132.5		0147.5			Meter	II Herringbone
LEAR	Apr 03	0132.6		0137.0			Meter	II
LEAR	Apr 03	0515.9		0541.9			Meter	IV
DWIN	Apr 03	0937		1000			Decimeter	IV Fiber bursts
BLEN	Apr 03	0939.6		1001.0			Decimeter; meter	IV Fiber bursts
BLEN	Apr 03	0947.4		1014.0			Meter	II
WEIS	Apr 03	0947.6		1019.4			30-160	II Harmonic
LEAR	Apr 03	0948.0		1005.0			Meter	II
WEIS	Apr 03	1000.5		1032.0			30-300	IV
DWIN	Apr 03	1017		1050			Decimeter	IV Pulsations
WEIS	Apr 03	1047.5		1058.0			170-1000	IV
BLEN	Apr 03	1117.3		1204.0			Meter	II
DWIN	Apr 03	1153.0		1156.0			Decimeter	IV
SGMR	Apr 03	1159.2		1205.2			Meter	IV
DWIN	Apr 03	1215		1223			Decimeter	IV Fiber bursts
HARV	Apr 03	2025		2038			Meter	II
CULG	Apr 03	2036		2038.5			Meter	II
CULG	Apr 04	0503		0537			Decimeter; meter	II Herringbone
LEAR	Apr 04	0508.4		0515.9			Meter	II
LEAR	Apr 04	0515.9		0541.9			Meter	IV
LEAR	Apr 04	0802.2		0821.3			Meter	IV
DWIN	Apr 04	0805.5		0809.5			Decimeter	IV
WEIS	Apr 04	0806.8		0820.6			30-260	II
BLEN	Apr 04	0806.8		0810.9			Meter	II
LEAR	Apr 04	0814.5		0821.3			Meter	II
DWIN	Apr 04	1006.0		1011.2			Decimeter	IV
KHAR	Apr 05	0942	0942	0958	070	1.00-1.08	H-alpha	S
HARV	Apr 05	2142		2157			Meter	II
CULG	Apr 05	2144		2205.5			Decimeter; meter	II
CULG	Apr 05	2145		2149			Decimeter	IV Pulsations
HARV	Apr 05	2145		2149			Decimeter; meter	IV
HARV	Apr 05	2149		2220			Meter	IV
CULG	Apr 05	2150		2310			Meter	IV Weak
CULG	Apr 06	0352		0358.5			Meter	II Herringbone
WEND	Apr 06	0728E		0733D	071	1.00	H-alpha	A (Flare loop)
GEOR	Apr 06	0812E	0908	0932D	030	1.0	H-alpha	A
WEND	Apr 06	0931E		1004	062	1.00-1.30	H-alpha	Q
WEND	Apr 06	0958E		1033D	072	1.05	H-alpha	A
GEOR	Apr 06	1105E		1205D	019	1.0	H-alpha	CB
BIGB	Apr 06	2202	2208	2218	068	1	H-alpha	A
CULG	Apr 07	0238		0243			Meter	II Weak
CULG	Apr 07	0419		0509			Decimeter	IV
CULG	Apr 07	0423		0550			Meter	IV
CULG	Apr 07	0423.5		0433			Decimeter	IV
CULG	Apr 07	0427		0506			Meter	II Herringbone
LEAR	Apr 07	0427.5		0502.0			Meter	II
WEND	Apr 07	1334E		1400	078	1.00	H-alpha	A
BIGB	Apr 07	1539	1553	1601	067	1	H-alpha	SP
WEND	Apr 07	1543	1553	1610	069	0.98-1.11	H-alpha	SP
GEOR	Apr 08	1258	1315	1350	016	1.0	H-alpha	A
BLEN	Apr 08	1300.5		1305.3			Meter	II
WEIS	Apr 08	1300.7		1306.5			50-330	II Harmonic
BIGB	Apr 08	1442	1449	1533	075	1	H-alpha	SP
DWIN	Apr 08	1624.0		1625.5			Decimeter	IV

MASS EJECTIONS FROM THE SUN

April 1981

Station	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Wavelength	Type of Event
DWIN	Apr 08	1626.7		1725			Decimeter	IV
WEIS	Apr 08	1637.0		1651.0			30-80	II
WEIS	Apr 08	1641.0					30-140	IV
BIGB	Apr 08	1719	1731	2006	075	1	H-alpha	SP
KHAR	Apr 09	0930		0935	074	1.00	H-alpha	S
KHAR	Apr 09	1025		1042	084	1.00	H-alpha	S
KHAR	Apr 09	1105	1105	1200	074-080	1.00	H-alpha	S
DWIN	Apr 10	1103.0		1135.0			Decimeter	IV
DWIN	Apr 10	1110.1		1135.0			Meter	II
WEIS	Apr 10	1110.2		1121.0			Meter	II Harmonic
WEIS	Apr 10	1114.0		1303.0			30-500	IV Pulsations
DWIN	Apr 10	1642.0		1730			Decimeter	IV
WEIS	Apr 10	1645.0		1659.0			180-1000	IV
WEIS	Apr 10	1649.1		1716.0			40-160	II Harmonic
DWIN	Apr 12	0511.1		0511.6			Decimeter	IV
CULG	Apr 12	2033		2200			Meter	IV
CULG	Apr 12	2136		2400			Decimeter	IV Pulsations
CULG	Apr 12	2140		2202			Meter	II Herringbone
CULG	Apr 12	2200		2400			Meter	IV
LEAR	Apr 12	2252.0		0909.0			Meter	IV
CULG	Apr 13	0000		0045			Decimeter; meter	IV
CULG	Apr 13	0045		0515			Meter	IV
CULG	Apr 13	0534		0535.5			Decimeter; meter	Possible II
KHAR	Apr 13	0817		0855	299	0.81	H-alpha	S
KHAR	Apr 13	0905	0908	0948	312-319	0.70	H-alpha	S
KHAR	Apr 13	0957	0957	1007	301	0.78	H-alpha	S
KHAR	Apr 13	1038	1038	1046	297	1.00-1.04	H-alpha	S
KHAR	Apr 13	1053	1053	1102	297	1.00-1.04	H-alpha	S
BIGB	Apr 13	1507	1509	1537	067	1	H-alpha	A
BIGB	Apr 13	1806	1826	1924	272-280	1	H-alpha	A
KHAR	Apr 14	0720		0733	297	0.90	H-alpha	S
KHAR	Apr 14	0726		0733	099	0.75	H-alpha	S
KHAR	Apr 14	1030	1046	1200	099	0.66	H-alpha	S
BIGB	Apr 14	1846	1858	1915	279	1	H-alpha	SP
CULG	Apr 14	2329.5		2400			Decimeter; meter	IV
BIGB	Apr 14	2332	2334	2342	086	1	H-alpha	SP
LEAR	Apr 14	2344.9		0006.9			Meter	II
LEAR	Apr 14	2344.9		0008.1			Meter	IV
WEND	Apr 15	0639	0647	0652D	294	0.97-1.06	H-alpha	S
WEND	Apr 15	0706	0714	0728	285	1.00-1.05	H-alpha	A
WEND	Apr 15	1520	1530	1542	292	0.97-1.05	H-alpha	A?
BIGB	Apr 15	1521	1526	1551	290	0.93	H-alpha	SP
BIGB	Apr 15	1816	1829	1849	284	0.93	H-alpha	SP
HARV	Apr 15	2137		2230			Decimeter	IV
BIGB	Apr 15	2238	2243	2311	281	0.96	H-alpha	SP
BIGB	Apr 16	2239	2241	0032D	310	0.36	H-alpha	SP
WEND	Apr 17	0635E		0705D	283	1.00-1.13	H-alpha	A
BLEN	Apr 17	1231.5	1253.0				Decimeter; meter	IV Pulsations
DWIN	Apr 17	1232		1353			Decimeter	IV
WEIS	Apr 17	1255		1404			30-80	IV
WEIS	Apr 17	1421		1446			50-450	II
BLEN	Apr 17	1425.0		1429.9			Decimeter; meter	II
CULG	Apr 20	0233		0234			Meter	Possible II
BIGB	Apr 20	1611	1638	1805	281	0.96	H-alpha	SP
HARV	Apr 20	1613		1640			Meter; dekameter	II
BLEN	Apr 20	1613.5		1624.8			Meter	II
WEIS	Apr 20	1613.7		1643.0			30-420	II Harmonic
SGMR	Apr 20	1629.8		1640.5			Meter	II

MASS EJECTIONS FROM THE SUN

April 1981

Station	Day	Observed UT Start	Max	End	Location RA°	R/R_0	Wavelength	Type of Event
BIGB	Apr 21	1811	1816	1825	084	1	H-alpha	A
BIGB	Apr 21	2130	2147	2216	276	1	H-alpha	SP
WEND	Apr 22	0806	0813	0825	281	1.00	H-alpha	A (Flare loop)
BIGB	Apr 22	2358	0000	0014	306	0.82	H-alpha	SP
CULG	Apr 23	0002		0020.5			Meter	II Herringbone
CULG	Apr 23	0004.5		0005.5			Decimeter	IV
CULG	Apr 23	0012.5		0016			Meter	IV
KHAR	Apr 23	1007	1030	1141	089-084	1.00-1.02	H-alpha	S
KHAR	Apr 23	1052	1057	1104	097	1.00	H-alpha	SP
KHAR	Apr 23	1112	1016	1056	097-101	1.00-1.03	H-alpha	Q
HARV	Apr 23	1625		1632			Decimeter; meter	IV
CULG	Apr 24	0042		0054			Decimeter	IV Weak
BIGB	Apr 24	0044	0045	0053	092	1	H-alpha	A
CULG	Apr 24	0052		0140			Meter	IV Weak
LEAR	Apr 24	0058.9		0931.5			Meter	IV
CULG	Apr 24	0059		0112			Meter	II
DWIN	Apr 24	0844		0949			Decimeter	IV
WEIS	Apr 24	0851		1040			30-280	IV
LEAR	Apr 24	0858.9		0931.5			Meter	IV
DWIN	Apr 24	1352.5		1353.3			Decimeter	IV Small group
DWIN	Apr 24	1354.5		1505.5			Decimeter	IV
HARV	Apr 24	1355		1429			Decimeter; meter	II
WEIS	Apr 24	1356		1506			200-1000	IV Fast drift
HARV	Apr 24	1356		1505			Decimeter; meter	IV
WEIS	Apr 24	1400		1508			30-200	IV Pulsations
SGMR	Apr 24	1400.1		1515.3			Meter	II
SGMR	Apr 24	1428.0		1433.2			Meter	II
BLEN	Apr 24	1533.2		1506.8			Decimeter; meter	IV Fiber bursts
DWIN	Apr 24	1617.8		1624			Decimeter	IV
WEIS	Apr 24	1643		1651			40-80	II Harmonic
HARV	Apr 24	1643		1651			Meter	II
BIGB	Apr 24	2354	0009	0047D	288	1	H-alpha	A
BIGB	Apr 25	1756	1806	1832	087	1	H-alpha	A
BIGB	Apr 25	1951	2008	2019	086	1	H-alpha	A
BIGB	Apr 25	2238	2245	2305	086	1	H-alpha	A
WEND	Apr 26	0717	0720	0747	085	0.84-0.97	H-alpha	S
DWIN	Apr 26	1110		1225			Decimeter	IV
WEND	Apr 26	1112	1141	1154	087	1.00	H-alpha	A
WEIS	Apr 26	1116		1217			300-1000	IV
WEIS	Apr 26	1125		1219			30-280	IV
WEND	Apr 26	1225		1246D	080	1.00	H-alpha	A
WEIS	Apr 27	0803.0		0815.5			160-1000	IV Pulsations
WEIS	Apr 27	0807		0830			30-160	IV Pulsations
WEIS	Apr 27	0812.8		0836.3			30-70	II Reverse slope
DWIN	Apr 27	0800.0		0825			Decimeter	IV
BLEN	Apr 27	0804.0		0815.0			Decimeter; meter	IV
LEAR	Apr 27	0807.8		0035.0			Meter	IV
DWIN	Apr 27	0839.5		0847			Decimeter	IV
HARV	Apr 28	2108		2127			Decimeter; meter	IV
CULG	Apr 28	2112.5		2157.5			Meter	II
CULG	Apr 28	2114		2147.5			Meter	IV
HARV	Apr 28	2115		2138			Meter; dekameter	II
CULG	Apr 28	2115		2140			Decimeter	IV
CULG	Apr 30	0308		0350			Meter; dekameter	II Herringbone
CULG	Apr 30	0308		0517			Decimeter; meter	IV
LEAR	Apr 30	0308.9		0356.9			Meter	IV
LEAR	Apr 30	0333.8		0346.8			Meter	II

SGD 446 Part II (Comprehensive)

MISCELLANEOUS DATA

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ACTIVE REGIONS
CARRINGTON ROTATION 1705
(February 9 to March 8, 1981)

Region No.	Coordinates Lat.	Coordinates Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1704	Activity at West Limb
1	38°S	558	1	>6	x		decreasing
2	30°N	351	2	+4			decreasing
3	5°N	347	1	>6	x	3	dispersed
4	18°N	346	1	>6	x		decreasing
5	16°S	338	2	+5			decreasing
6	22°N	338	3	-3			stable
7	32°S	334	1	-3	x		dispersed
8	12°N	333	6	>6			decreasing
9	24°N	333	1	>6	x		dispersed
10	22°S	330	2	0			decreasing
11	7°S	320	2	>6			decreasing
12	30°S	313	1	>6	x		dispersed
13	5°S	260	3	-4			increasing
14	21°N	260	4	>6			decreasing
15	17°N	259	2	+2			decreasing
16	18°S	253	3	>6			decreasing
17	12°S	252	1	+6	x		disappeared
18	6°S	250	1	>6	x		dispersed
19	13°N	250	3	>6		12	decreasing
20	13°N	250	3	+1			decreasing
21	16°N	234	3	>6			decreasing
22	28°N	220	1	>6	x		dispersed
23	13°N	210	1	>6	x	18	dispersed
24	12°N	198	6	+1			stable
25	7°S	197	1	>6	x	23	decreasing
26	27°S	190	1	>6	x	17-22	decreasing
27	12°S	182	1	>6	x		decreasing
28	21°S	182	1	>6	x		decreasing
29	14°N	181	2	+3			decreasing
30	13°N	175	1	>6	x		dispersed
31	21°N	175	1	>6	x		dispersed
32	15°N	148	1	>6	x		dispersed
33	29°N	144	1	>6	x		dispersed
34	26°N	134	1	>6	x		dispersed
35	14°S	133	3	>6			decreasing
36	17°S	131	2	>6			decreasing
37	21°N	126	1	-3	x		stable
38	6°S	112	1	+4	x		stable
39	15°S	99	6	>6			decreasing
40	18°N	99	2	>6			decreasing
41	8°S	98	2	>6			decreasing
42	25°N	95	1	+2	x		disappeared
43	12°S	76	5	>6		36-38	decreasing
44	21°N	74	1	>6	x	37	dispersed
45	10°N	71	2	-1			decreasing
46	10°S	49	3	>6			decreasing
47	2°S	36	2	>6			decreasing
48	6°N	17	2	>6			decreasing
49	16°N	16	1	>6	x		dispersed
50	13°N	5	2	>6			decreasing
51	10°S	2	2	-4			increasing
52	2°S	0	4	>6			decreasing
53	7°N	0	1	>6	x		dispersed

ACTIVE REGIONS
CARRINGTON ROTATION 1706
(March 8 to April 4, 1981)

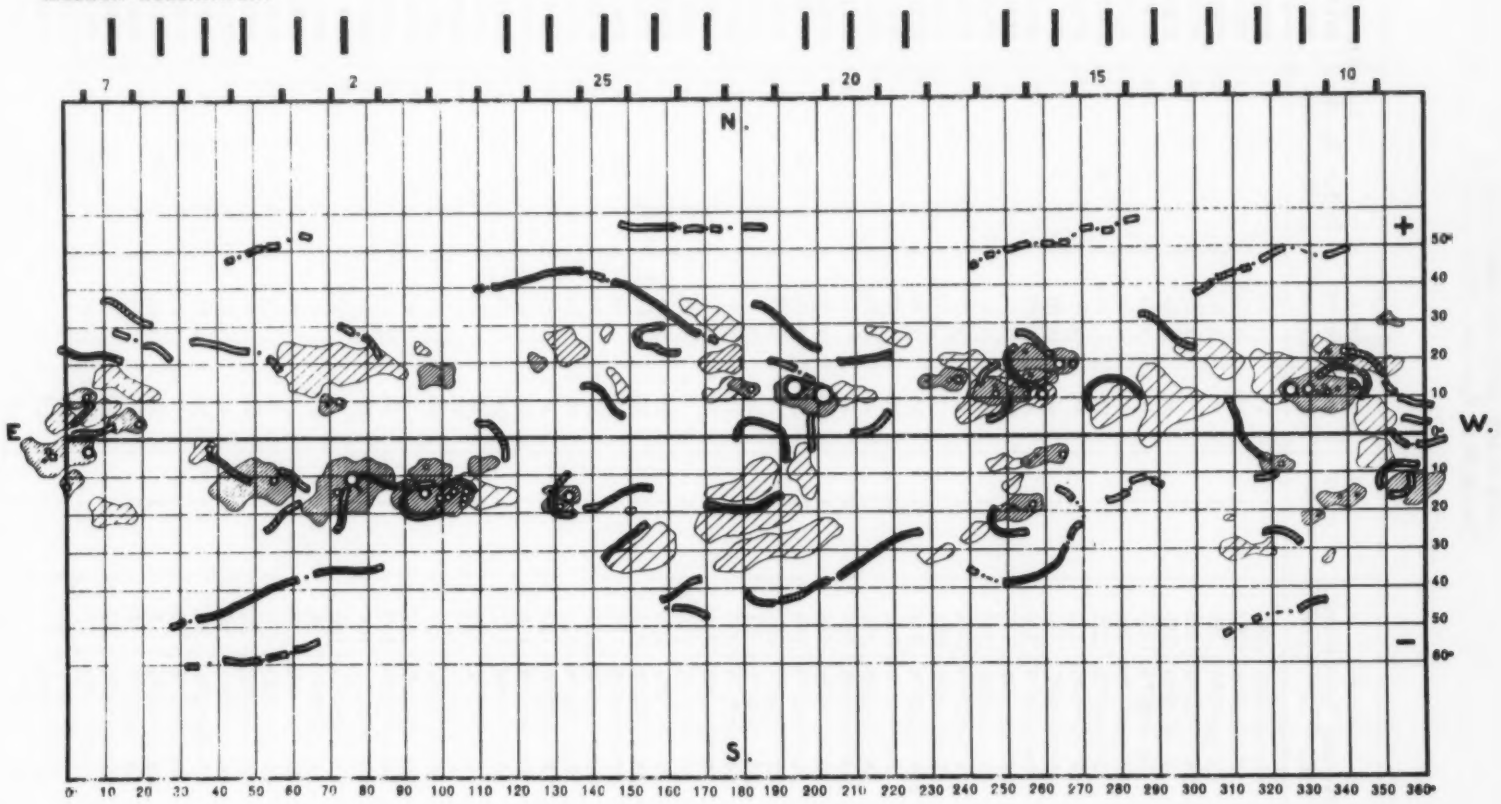
Region No.	Coordinates Lat.	Coordinates Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1705	Activity at West Limb
1	19°S	356	1	-4	x		dispersed
2	20°N	353	1	>6	x		decreasing
3	17°N	345	1	>6	x		decreasing
4	30°N	345	1	>6	x		decreasing
5	9°N	345	1	>6	x		decreasing
6	17°S	340	1	+6	x	5	dispersed
7	20°N	340	2	-4	x		decreasing
8	27°N	335	3	>6		6	decreasing
9	5°S	333	1	+5	x		dispersed
10	14°S	330	1	-2	x		?
11	16°N	326	1	>6	x		decreasing
12	9°N	315	6	>6	x		stable
13	13°N	303	1	+1	x		dispersed
14	22°N	286	1	>6	x		dispersed
15	14°S	285	2	0			decreasing
16	11°N	272	1	>6	x		dispersed
17	4°S	268	2	>6		13	decreasing
18	14°N	265	2	-1			stable
19	20°S	259	2	+4			decreasing
20	6°S	256	1	>6	x		dispersed
21	22°N	255	1	>6	x	14	decreasing
22	12°N	251	1	>6	x	19	dispersed
23	12°N	251	1	>6	x	20	decreasing
24	21°N	235	1	>6	x		decreasing
25	10°N	214	1	>6	x		decreasing
26	10°N	210	5	0			stable
27	9°S	205	1	>6	x		dispersed
28	23°S	203	1	>6	x		dispersed
29	14°N	199	3	>6		24	decreasing
30	15°N	187	1	>6	x		dispersed
31	29°N	175	1	>6	x		dispersed
32	12°N	172	3	>6			decreasing
33	13°N	164	3	>6			decreasing
34	17°N	143	6	>6			decreasing
35	17°S	139	2	>6			decreasing
36	27°S	129	2	>6			decreasing
37	22°N	127	2	>6			decreasing
38	18°S	113	2	0			stable
39	20°N	109	1	>6	x		dispersed
40	24°S	105	1	>6	x		decreasing
41	43°S	100	5	>6			decreasing
42	24°N	94	2	>6			decreasing
43	27°N	79	1	>6	x		dispersed
44	9°S	76	1	>6		43	dispersed
45	10°S	65	2	>6			decreasing
46	14°N	57	1	+5	x		disappeared
47	17°N	40	1	>6	x		decreasing
48	13°S	29	1	+1	x		disappeared
49	3°N	27	1	>6	x	48	decreasing
50	27°N	24	4	>6			decreasing
51	16°N	22	2	>6			decreasing
52	10°N	10	1	>6	x	50	disappeared
53	9°S	9	1	>6	x	51-52	decreasing
54	13°N	7	1	-2	x		dispersed
55	5°S	5	2	-2			decreasing

SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1705

FEBRUARY 9 - MARCH 8, 1981

MEUDON OBSERVATORY

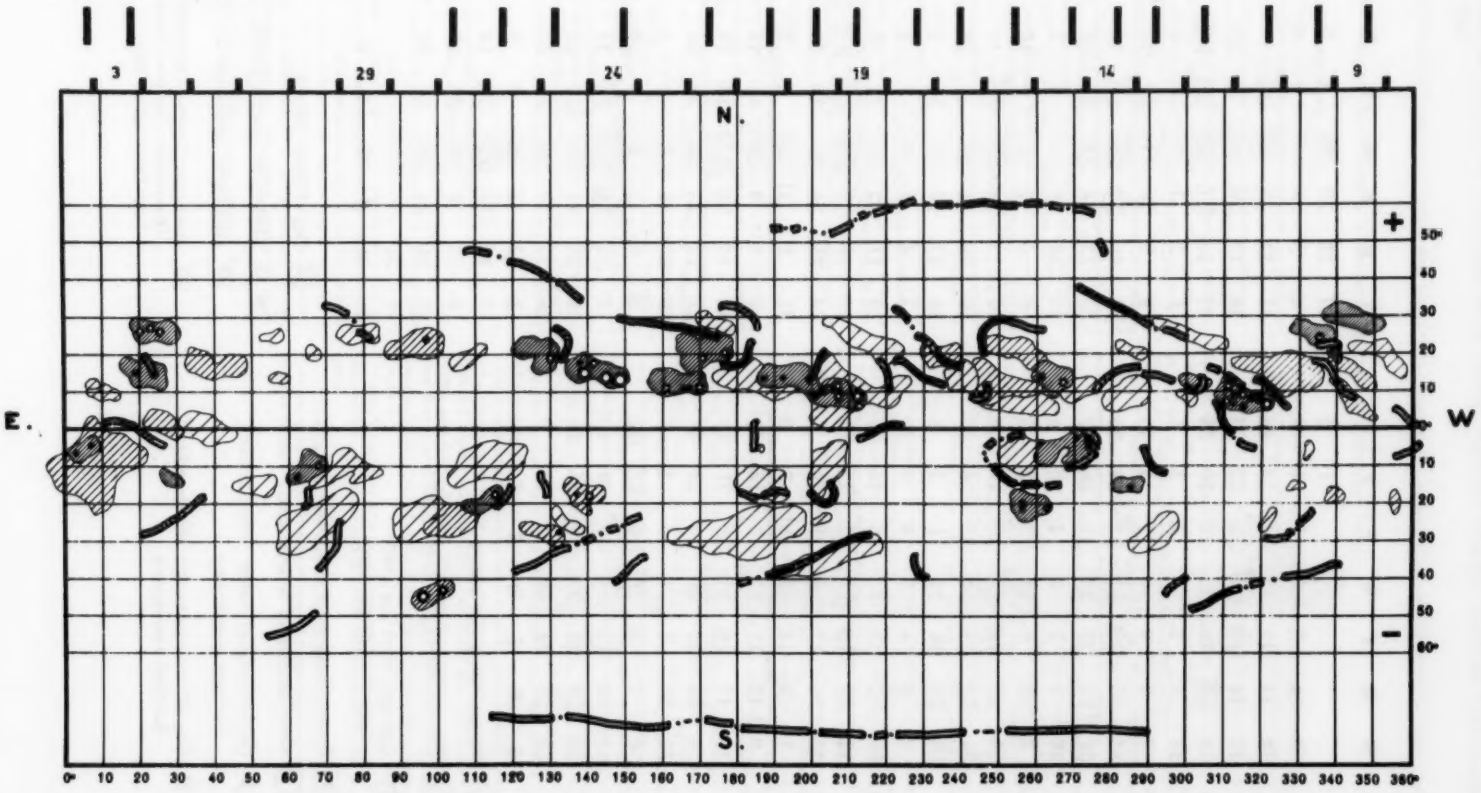


SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1706

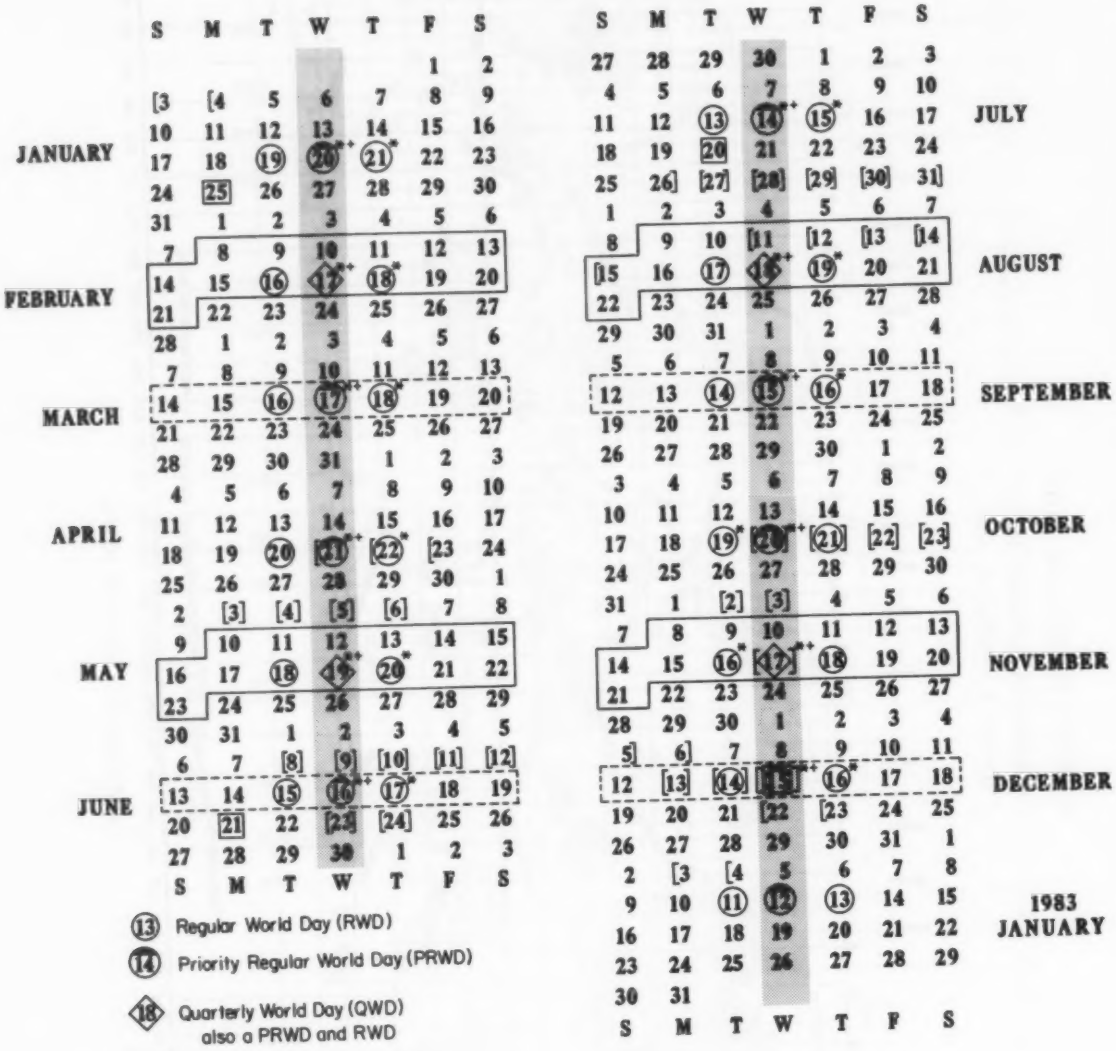
MARCH 8, – APRIL 4, 1981

MEUDON OBSERVATORY



81
Misc
Mar 81

International Geophysical Calendar for 1982



(13) Regular World Day (RWD)

(14) Priority Regular World Day (PRWD)

(18) Quarterly World Day (QWD) also a PRWD and RWD

2 Regular Geophysical Day (RGD)

9 10 World Geophysical Interval (WGI)

[3 Day with unusual meteor shower activity, Northern Hemisphere

5] Day with unusual meteor shower activity, Southern Hemisphere

25 Day of Solar Eclipse

14 15 Airglow and Aurora Period

20* Dark Moon Geophysical Day (DMGD)

20+ Incoherent Scatter Coordinated Observation Day and Coordinated Tidal Observation Day

NOTES:

1. An Alpine Experiment (ALPEX), of the WMO/ICSU World Climate Research Program, continues from 1 January 1982 through 30 September 1982.

2. Post-SMY STIP INTERVAL XIII (started 1 December 1981) runs through 31 January 1982; and STIP INTERVAL XIV is 20 May through 20 July 1982.

3. Middle Atmosphere Program (MAP) begins 1 January 1982 and runs through 1985.

EXPLANATIONS

This Calendar continues the series begun for the IGY years 1957-58, and is issued annually to recommend dates for solar and geophysical observations which cannot be carried out continuously. Thus, the amount of observational data in existence tends to be larger on Calendar days. The recommendations on data reduction and especially the flow of data to **World Data Centers (WDCs)** in many instances emphasize Calendar days. The Calendar is prepared by the **International Ursigram and World Days Service (IUWDS)** with the advice of spokesmen for the various scientific disciplines. For greater detail concerning explanations or recommendations your attention is called to information published periodically in **IAGA News, IUGG Chronicle, URSI Information Bulletin** or other scientific journals.

The definitions of the designated days remain as described on previous Calendars. **Universal Time (UT)** is the standard time for all world days. **Regular Geophysical Days (RGD)** are each Wednesday. **Regular World Days (RWD)** are three consecutive days each month, always Tuesday, Wednesday and Thursday near the middle of the month. **Priority Regular World Days (PRWD)** are the RWD which fall on Wednesdays. **Quarterly World Days (QWD)** are one day each quarter and are the PRWD which fall in the **World Geophysical Intervals (WGI)**. The **WGI** are fourteen consecutive days in each season, beginning on Monday of the selected month, and normally shift from year to year. In 1982 the **WGI** will be February, May, August and November.

The **Solar Eclipses** are January 25 (partial) beginning in South Atlantic Ocean skirting the Antarctic continent, crossing the Antarctic peninsula and ending in South Pacific Ocean south of New Zealand; June 21 (partial) beginning in South Atlantic Ocean, passing south of Africa and ending in Indian Ocean; July 20 (partial) beginning over Kamchatka peninsula, crossing Siberia, southern Finland, Denmark and ending in Portugal; and December 15 (partial) beginning west of Portugal in Atlantic Ocean, crossing England, Norway, Sweden, Finland, USSR, and ending in China north of Pakistan.

Meteor Showers (selected by P. M. Millman, Ottawa) include important visual showers and also unusual showers observable mainly by radio and radar techniques. The dates are coded to indicate whether the shower is observable in the northern or southern hemisphere.

The occurrence of unusual solar or geophysical conditions is announced or forecast by the IUWDS through various types of geophysical **"Alerts"** which are widely distributed by telegram and radio broadcast on a current schedule. Stratospheric warmings **(STRATWARM)** are also designated. The meteorological telecommunications network coordinated by WMO carries these worldwide Alerts once daily soon after 0400 UT. For definitions of Alerts see IUWDS "Synoptic Codes for Solar and Geophysical Data, Third Revised Edition 1973" and its amendments. **Retrospective World Intervals** are selected and announced by MONSEE and elsewhere to provide additional analyzed data for particular events studied in the ICSU Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) programs.

RECOMMENDED SCIENTIFIC PROGRAMS
OPERATIONAL EDITION

(The following material was reviewed in 1981 by spokesmen of IAGA, WMO and URSI as suitable for coordinated geophysical programs in 1982.)

Airglow and Aurora Phenomena. Airglow and auroral observatories operate with their full capacity around the New Moon periods. However, for progress in understanding the mechanism of, inter alia, low latitude aurora, the coordinated use of all available techniques, optical and radio, from the ground and in space is required. Thus, for the airglow and aurora 7-day periods on the Calendar, ionosonde, incoherent scatter, special satellite or balloon observations, etc., are especially encouraged. Periods of approximately two weeks' duration centered on the New Moon are proposed for high resolution studies of ionospheric, auroral and magnetospheric observations at high latitudes during northern winter.

Atmospheric Electricity. Not-continuous measurements and data reduction for continuous measurements of atmospheric electric current density, field, conductivities, space charges, ion number densities, ionosphere potentials, condensation nuclei, etc.; both at ground as well as with radiosondes, aircraft, rockets; should be done with first priority on the **RGD** each Wednesday, beginning on 6 January 1982 at 1800 UT, 13 January at 0000 UT, 20 January at 0600 UT, 27 January at 1200 UT, etc. (beginning hour shift six hours each week, but is always on Wednesday). Minimum program is at the same time on PRWD beginning with 20 January at 0600 UT. Data reduction for continuous measurements should be extended, if possible, to cover at least the full RGD including, in addition, at least 6 hours prior to indicated beginning time. Measurements prohibited by bad weather should be done 24 hours later. Results on sferics and ELF are wanted with first priority for the same hours, short-period measurements centered around the minutes 35-50 of the hours indicated. **Priority Weeks** are the weeks which contain a PRWD; minimum priority weeks are the ones with a QWD. The World Data Centre for Atmospheric Electricity, 7 Karbysheva, Leningrad 194018, USSR, is the collection point for data and information on measurements.

Geomagnetic Phenomena. It has always been a leading principle for geomagnetic observatories that operations should be as continuous as possible and the great majority of stations undertake the same program without regard to the Calendar.

Stations equipped for making magnetic observations, but which cannot carry out such observations and reductions on a continuous schedule are encouraged to carry out such work at least on **RWD** (and during times of **MAGSTORM** Alert).

Ionospheric Phenomena. Special attention is continuing on particular events which cannot be forecast in advance with reasonable certainty. These will be identified by Retrospective World Intervals. The importance of obtaining full observational coverage is therefore stressed even if it is possible to analyze the detailed data only for the chosen events. In the case of vertical incidence sounding, the need to obtain quarter-hourly ionograms at as many stations as possible is particularly stressed and takes priority over recommendation (a) below when both are not practical.

For the vertical incidence (VI) sounding program, the summary recommendations are: (a) all stations should make soundings at least every quarter hour. Stations which normally record at every quarter should, if possible, record more frequently on **RWDs**; (b) all stations are encouraged to make f-plots on **RWDs**; f-plots should be made for high latitude stations, and for the so-called "representative" stations at lower latitudes for all days (i.e., including **RWDs** and **WGIs**), (Continuous records of ionospheric parameters are acceptable in place of f-plots at temperate and low latitude stations); (c) copies of hourly ionograms with appropriate scales for **QWDs** are to be sent to WDCs; (d) stations in the eclipse zone and its conjugate area should take continuous observations on solar eclipse days and special observations on adjacent days. See also recommendations under **Airglow and Aurora Phenomena**.

For incoherent scatter observation program, every effort should be made to obtain measurements at least on the **Incoherent Scatter Coordinated Observation Days**, and intensive series should be attempted whenever possible in **WGIs** or the **Airglow and Aurora Periods**. The need for collateral VI observations with not more than quarter-hourly spacing at least during all observation periods is stressed. Dr. M.J. Baron (U.S.A.), URSI Working Group G.5, is coordinating special programs.

For the ionospheric drift or wind measurement by the various radio techniques, observations are recommended to be concentrated on the weeks including **RWDs**.

For traveling ionosphere disturbances propose special periods for coordinated measurements of gravity waves induced by magnetospheric activity, probably on selected **PRWD** and **RWD**.

For the ionospheric absorption program half-hourly observations are made at least on all **RWDs** and half-hourly tabulations sent to WDCs. Observations should be continuous on **solar eclipse** days for stations in eclipse zone and in its conjugate area. Special efforts should be made to obtain daily absorption measurements at temperate latitude stations during the period of Absorption Winter Anomaly, particularly on days of abnormally high or abnormally low absorption (approximately October-March, Northern Hemisphere; April-September, Southern Hemisphere).

For back-scatter and forward-scatter programs, observations should be made and analyzed on all **RWDs** at least.

For synoptic observations of mesospheric (D region) electron densities, several groups have agreed on using the **RGD** for the hours around noon.

For ELF noise measurements involving the earth-ionosphere cavity resonances any special effort should be concentrated during the **WGIs**.

It is recommended that more intensive observations in all programs be considered on days of **unusual meteor activity**.

Meteorology. Particular efforts should be made to carry out an intensified program on the **RGD** — each Wednesday, UT. A desirable goal would be the scheduling of meteorological rocketsondes, ozone sondes and radiometer sondes on these days, together with maximum-altitude rawinsonde ascents at both 0000 and 1200 UT.

During **WGI** and **STRATWARM** Alert Intervals, intensified programs are also desirable, preferably by the implementation of **RGD**-type programs (see above) on Mondays and Fridays, as well as on Wednesdays.

Middle Atmosphere Program (MAP). MAP runs from 1 January 1982 through 1985. Techniques for observing the middle atmosphere should concentrate or center their observations on the RGDs, PRWDs, and QWDs. It is recommended that observing runs for studies of planetary waves and tides be at least 10 days centered on the PRWDs and QWDs. Non-continuous studies of stratospheric warmings and the effects of geomagnetic activity on the middle atmosphere must be initiated by STRATWARM and MAGSTORM alerts, respectively. For more details see the "Recommended Scientific Programs" on the reverse of the **Middle Atmosphere Dynamics Calendar for 1982**, which will be published as a special edition of the **IGC for 1982.**

Solar Phenomena. Observatories making specialized studies of solar phenomena, particularly using new or complex techniques, such that continuous observation or reporting is impractical, are requested to make special efforts to provide to WDCs data for **solar eclipse** days, **RWDs** and during **PROTON/FLARE ALERTS**. The attention of those recording solar noise spectra, solar magnetic fields and doing specialized optical studies is particularly drawn to this recommendation.

Space Research, Interplanetary Phenomena, Cosmic Rays, Aeronomy. Experimenters should take into account that observational effort in other disciplines tends to be intensified on the days marked on the Calendar, and schedule balloon and rocket experiments accordingly if there are no other geophysical reasons for choice. In particular it is desirable to make rocket measurements of ionospheric characteristics on the same day at as many locations as possible; where feasible, experimenters should endeavor to launch rockets to monitor at least normal conditions on the **Quarterly World Days (QWD)** or on **RWDs**, since these are also days when there will be maximum support from ground observations. Also, special efforts should be made to assure recording of telemetry on **QWD** and **Airglow and Aurora Periods** of experiments on satellites and of experiments on spacecraft in orbit around the Sun.

For URSI/IAGA Coordinated Tidal Observations Program (CTOP) contact Dr. R. G. Roper (USA) for the 1982 calendar.

The International Ursigram and World Days Service (IUWDS) is a permanent scientific service of the International Union of Radio Science (**URSI**), with the participation of the International Astronomical Union and the International Union Geodesy and Geophysics. IUWDS adheres to the Federation of Astronomical and Geophysical Services of the International Council of Scientific Unions. The IUWDS coordinates the international aspects of the world days program and rapid data interchange.

This Calendar for 1982 has been drawn up by J. V. Lincoln, of the IUWDS Steering Committee, in close association with A. H. Shapley, Chairman of MONSEE of SCOSTEP, and spokesmen for the various scientific disciplines in SCOSTEP, IAGA and URSI. Similar Calendars have been issued annually beginning with the IGY, 1957-58, and have been published in various widely available scientific publications.

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Additional copies are available upon request to IUWDS Chairman, Dr. P. Simon, Ursigrammes Observatoire, 92190 Meudon, France, or IUWDS Acting Secretary for World Days, Miss H. E. Coffey, WDC-A for Solar-Terrestrial Physics, NOAA, D63, 325 Broadway, Boulder, Colorado 80303, U.S.A.

SOME OTHER SOURCES OF DATA

Data Available: Some data available in publication form are cited here. A list is given, along with addresses of the responsible institutions. The WDC-A for Solar-Terrestrial Physics publishes the Toyokawa, Ottawa and Penticton radio data in its monthly publication, *Solar-Geophysical Data*. The WDC-A for Solar-Terrestrial Physics also receives most of the periodicals when they become available.

Belgium: *Bulletin d'Observations: Activite Solaire - Observations Radio-electriques Solaires - 600 MHz (Humain, Belgium)* Observatoire Royal de Belgique, Ave. Circulaire 3, Brussels, Belgium (monthly since 1962)

Canada: *Solar Noise Observations at 2800 Mc/s (Ottawa - ARO) and 2700 Mc/s (Penticton - DRAO)* Series C Monthly Report, National Research Council, Radio Astronomy Section Ottawa 7, Ontario, Canada (since 1947)

France: *Carte Synoptiques de la Chromosphere Solaire* Observatoire de Paris, 92 Meudon, France (monthly since 1931)

Germany: *Daily Mean Value of Solar Flux Density* Heinrich-Hertz Institut, 1199 Berlin-Adlershof, Rudower Chaussee 5, G.D.R. (monthly since Jul 1957)

Italy: *Solar Phenomena - Monthly Bulletin and Photographic Supplement* Osservatorio Astronomica di Roma, Monte Mario, Rome, Italy (monthly since 1958); *Osservazion Solari, Solar Flux and Distinctive Events* Osservatorio Astronomico Di Trieste (quarterly since 1965); *Solar Observations made at Catania Astrophysical Observatory* (annually since 1967)

Japan: *Monthly Report of Solar Radio Emission* Radio Astronomy Section, Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan (since 1956); *Solar Activity Chart* WDC-C2, Toyokawa Observatory, Nagoya University, Toyokawa, Japan (annually since 1968); *IAU Quarterly Bulletin on Solar Activity* Tokyo Astronomical Observatory, Mitaka, Tokyo, Japan (since 1978)

Netherlands: *Geomagnetic Data* IAGA Bulletin No. 12 (1932-69), No. 32 (since 1970) IUGG Publications Office, 39 ter, Rue Gay-Lussac, Paris V, France (annually)

Philippines: Manila Observatory "Solar Maps and Activity", Manila Observatory, P.O. Box 1231, Manila, Philippines (monthly)

Switzerland: Bulletin of "Berne Solar Observations", Institute of Applied Physics, Div. of Solar Observations, Sidlerstrasse 5, 3012 Berne, Switzerland (since 1968)

Taiwan: *Report on Sunspot Observations* Taiwan Provincial Weather Bureau Observatory, Taipei, Taiwan (quarterly since 1957)

USSR: СОЛНЕЧНЫЕ ДАННЫЕ *(Solar Data)* USSR Academy of Science (monthly since 1958); КОСМИЧЕСКИЕ ДАННЫЕ *(Cosmic Data)* (monthly since 1962); *Magnetic Fields of Sunspots* (bimonthly since 1964)

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